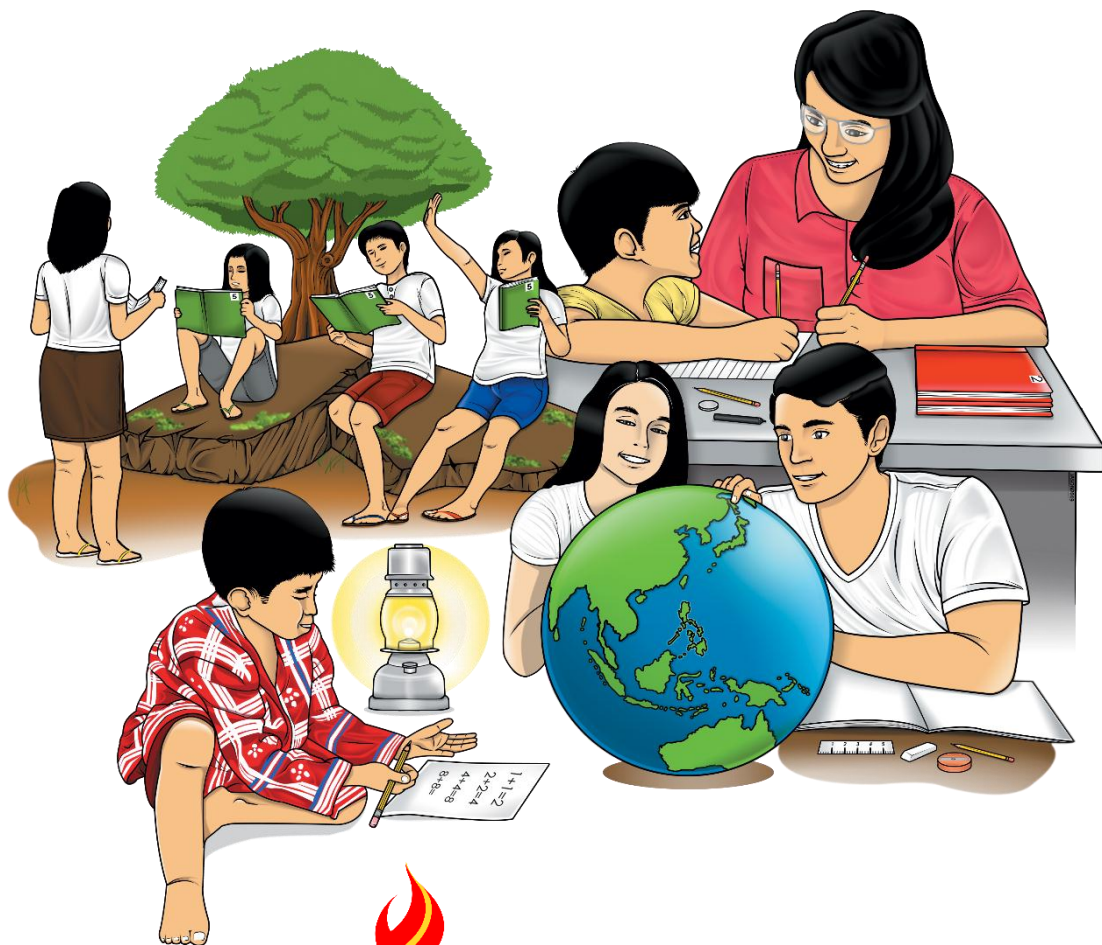


Mathematics

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



Mathematics – Grade 3
Alternative Delivery Mode
Quarter 1 – Module 1: Visualizing Numbers up to 10 000
First Edition, 2020

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Mathematics

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

Introductory Message

For the facilitator:

Welcome to the Mathematics Alternative Delivery Mode (ADM) Module on **Visualizing Numbers up to 10 000!**

This module was collaboratively designed, developed and reviewed by educators both from public and private institutions to assist you, the teacher or facilitator in helping the learners meet the standards set by the K to 12 Curriculum while overcoming their personal, social, and economic constraints in schooling.

This learning resource hopes to engage the learners into guided and independent learning activities at their own pace and time. Furthermore, this also aims to help learners acquire the needed 21st century skills while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:



Notes to the Teacher

This contains helpful tips or strategies that will help you in guiding the learners.

As a facilitator, you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Furthermore, you are expected to encourage and assist the learners as they do the tasks included in the module.

For the learner:

Welcome to the Mathematics Alternative Delivery Mode (ADM) Module on **Visualizing Numbers up to 10 000!**

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. It was made easy for you to process the contents of the learning resource while being an active learner.

This module has the following parts and corresponding icons:



What I Need to Know

This will give you an idea of the skills or competencies you are expected to learn in the module.



What I Know

This part includes an activity that aims to check what you already know about the lesson to take. If you get all the answers correct (100%), you may decide to skip this module.



What's In

This is a brief drill or review to help you link the current lesson with the previous one.



What's New

In this portion, the new lesson will be introduced to you in various ways such as a story, a song, a poem, a problem opener, an activity or a situation.



What is It

This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.



What's More

This comprises activities for independent practice to solidify your understanding and skills of the topic. You may check the answers to the exercises using the Answer Key at the end of the module.



What I Have Learned

This includes questions or blank sentence/paragraph to be filled in to process what you learned from the lesson.



What I Can Do

This section provides an activity which will help you transfer your new knowledge or skill into real life situations or concerns.



Assessment

This is a task which aims to evaluate your level of mastery in achieving the learning competency.



Additional Activities

In this portion, another activity will be given to you to enrich your knowledge or skill of the lesson learned.



Answer Key

This contains answers to all activities in the module.

At the end of this module you will also find:

References

This is a list of all sources used in developing this module.

The following are some reminders in using this module:

1. Use the module with care. Do not put unnecessary mark/s on any part of the module. Use a separate sheet of paper in answering the exercises.
2. Don't forget to answer *What I Know* before moving on to the other activities included in the module.
3. Read the instruction carefully before doing each task.
4. Observe honesty and integrity in doing the tasks and checking your answers.
5. Finish the task at hand before proceeding to the next.
6. Return this module to your teacher/facilitator once you are through with it.

If you encounter any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator. Always bear in mind that you are not alone.

We hope that through this material, you will experience meaningful learning and gain deep understanding of the relevant competencies. You can do this.



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:

1. Visualize numbers from 1 001 to 10 000.

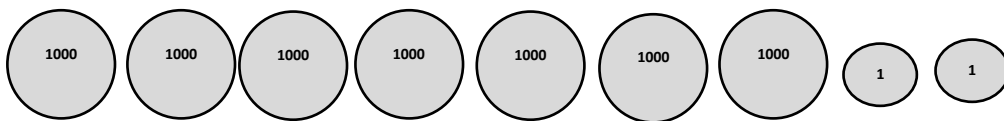
Enjoy your journey. Good luck!



What I Know

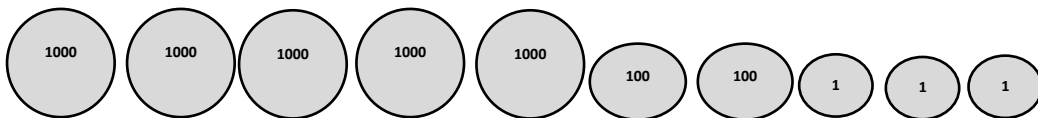
Read each question carefully. Encircle the letter of the correct answer.

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



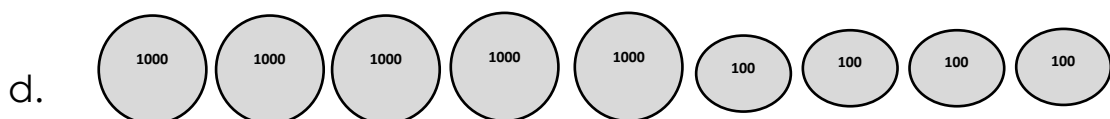
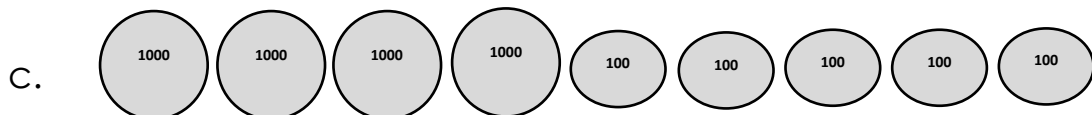
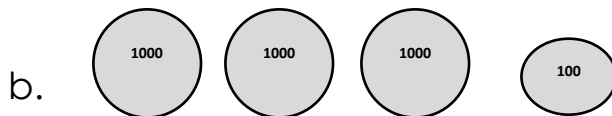
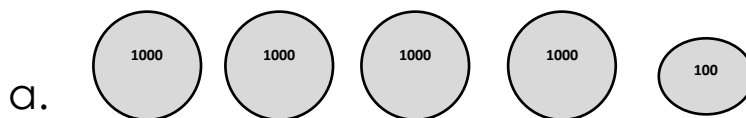
- a. 5 200 b. 6 202 c. 7 002 d. 7 020

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

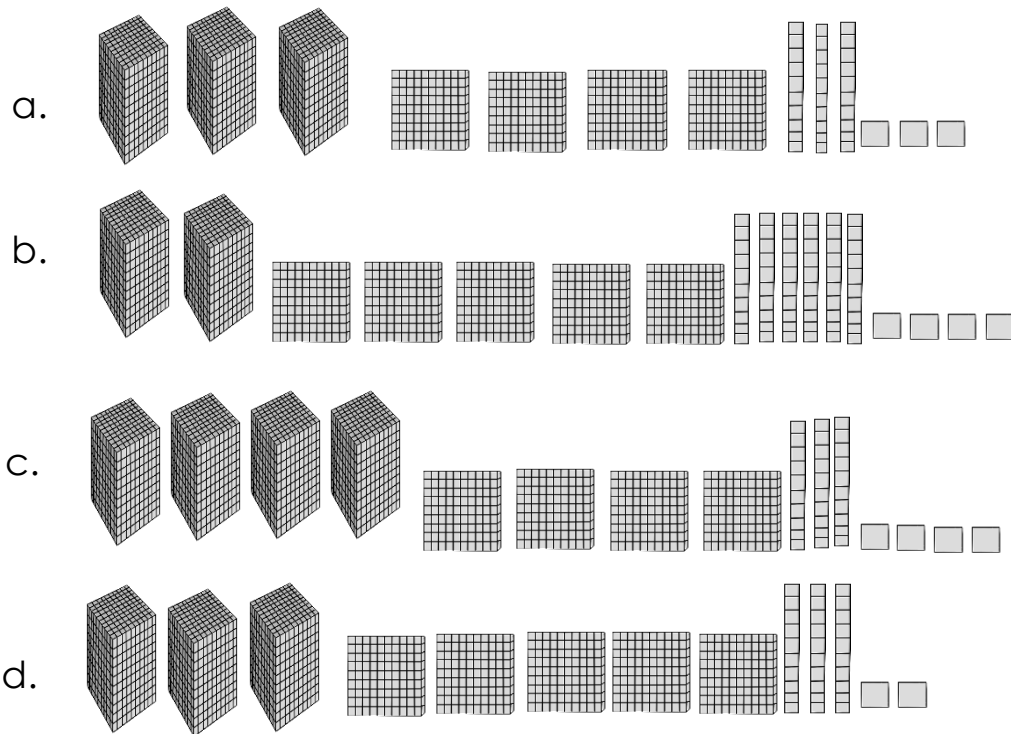


- a. 4 223 b. 4 302 c. 5 103 d. 5 203

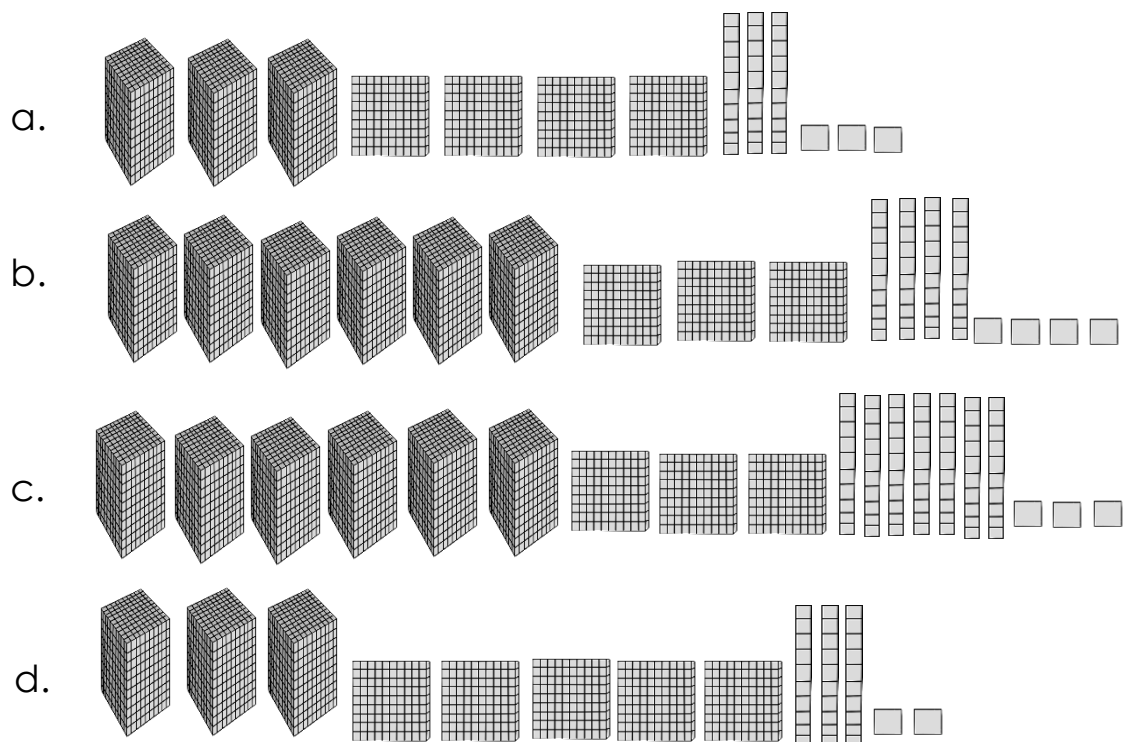
3. Which set of number discs represents 4 500?



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



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



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.

Two-digit numbers:

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

Think about this!

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

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?

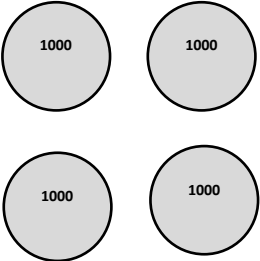
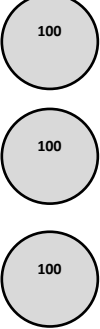
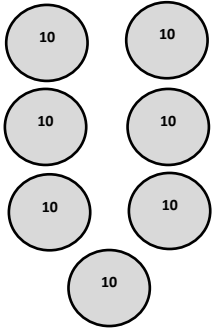
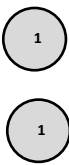
Answer: There were 4 372 sacks of rice being distributed to the victims.

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.

			
<u>Four</u> 1 000	<u>Three</u> 100	<u>Seven</u> 10	<u>Two</u> 1
Total value: <u>4</u> 000	Total value: <u>3</u> 00	Total value: <u>7</u> 0	Total value: <u>2</u>
4 372			

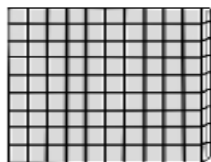
Representation using blocks and grids is another way to visualize 4 372.



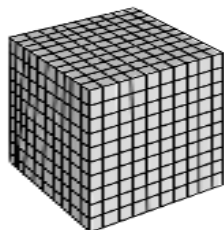
1 square = one (1)



10 squares = 1 long (1 ten)

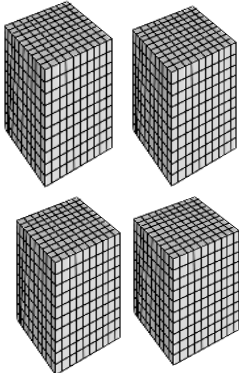
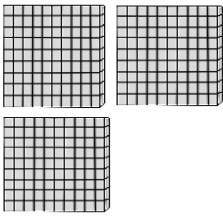
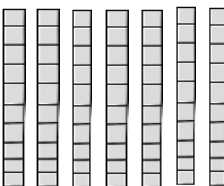



10 longs (10 tens) = 1 flat (1 hundred)



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

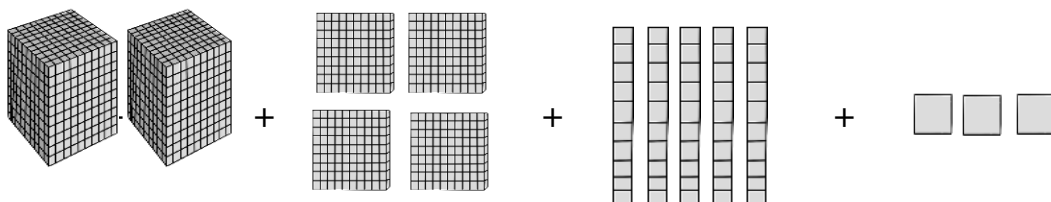
Using blocks, flats, longs and squares to represent the number of sacks of rice distributed to the victims during the Typhoon Pablo is shown below.

			
<u>Four</u> 1 000	<u>Three</u> 100	<u>Seven</u> 10	<u>Two</u> 1
Total value: <u>4</u> 000	Total value: <u>3</u> 00	Total value: <u>7</u> 0	Total value: <u>2</u>
4 372			

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

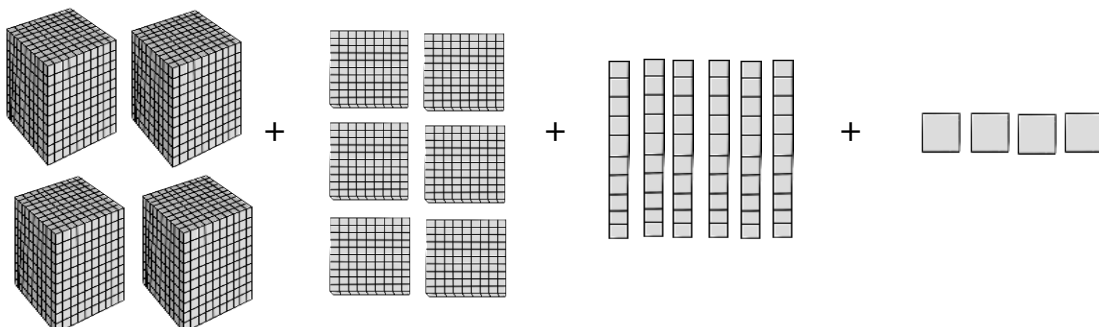
1. **2 453**

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

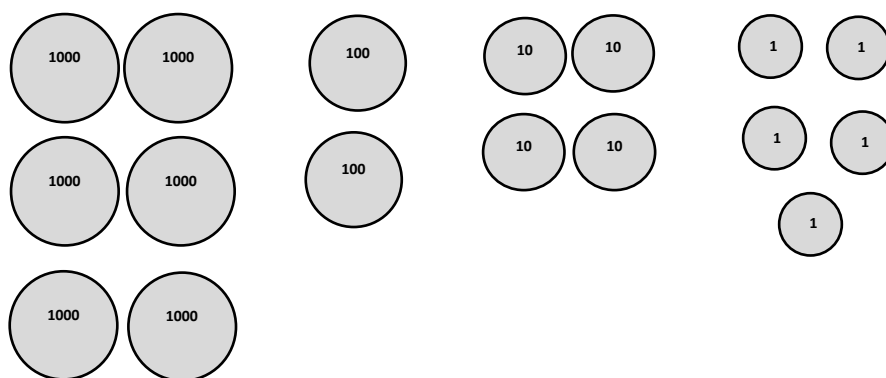




What is It

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?



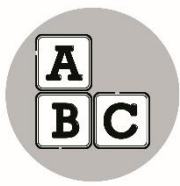
$$6\ 000 + 200 + 40 + 5 = 6\ 245$$

Given the visualization of numbers, 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)	=	<u>5</u>

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



What's More

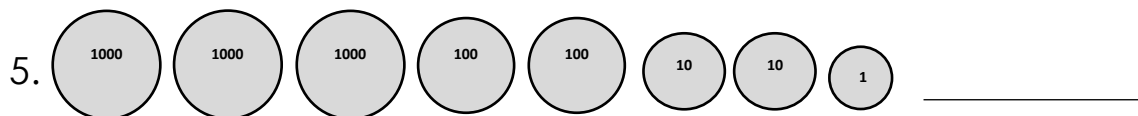
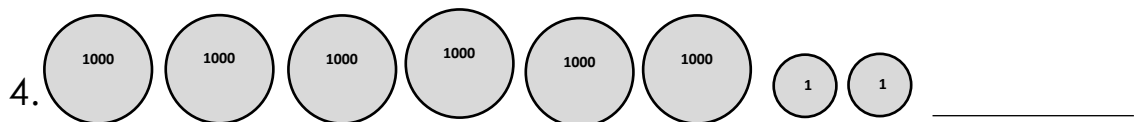
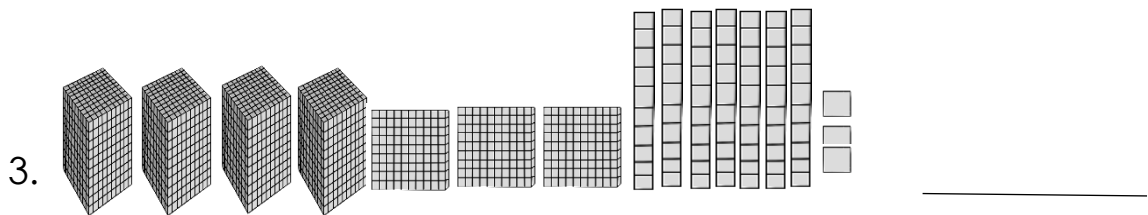
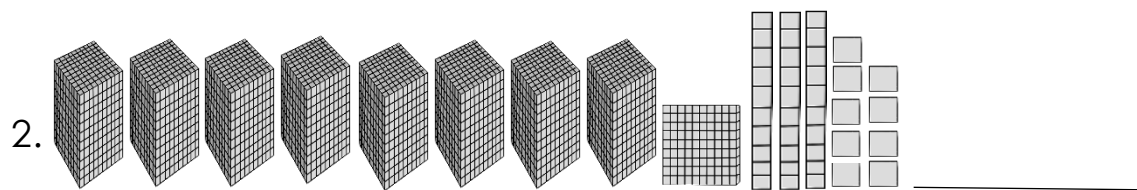
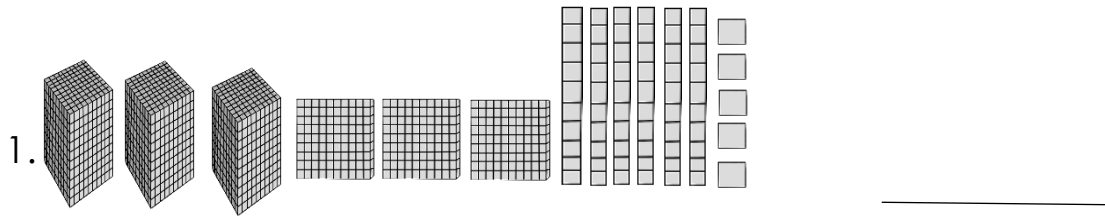
Activity 1

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

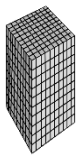
Write the number represented by each set of numbers discs, blocks, flats, longs and squares.





What I Have Learned

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



blocks (thousands) ,



flats (hundreds),



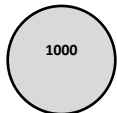
longs (tens)

and

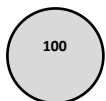


square (ones).

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

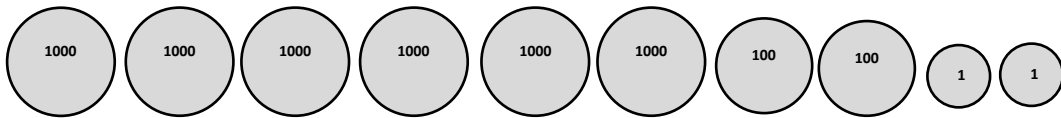
5. 10 000



Assessment

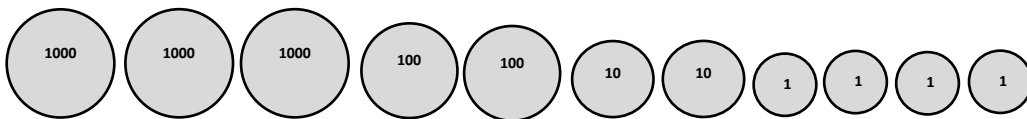
Directions: Multiple Choice. Read each question carefully. Select the letter of the correct answer.

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



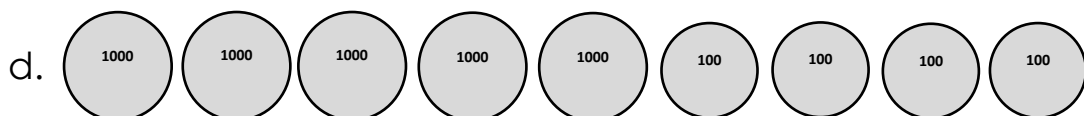
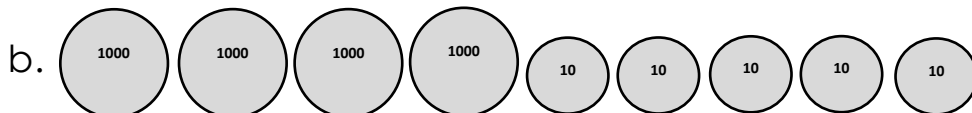
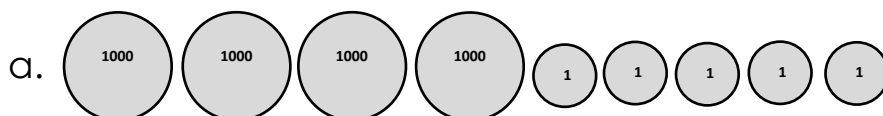
- a. 8 200 b. 6 202 c. 6 002 d. 8 002

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

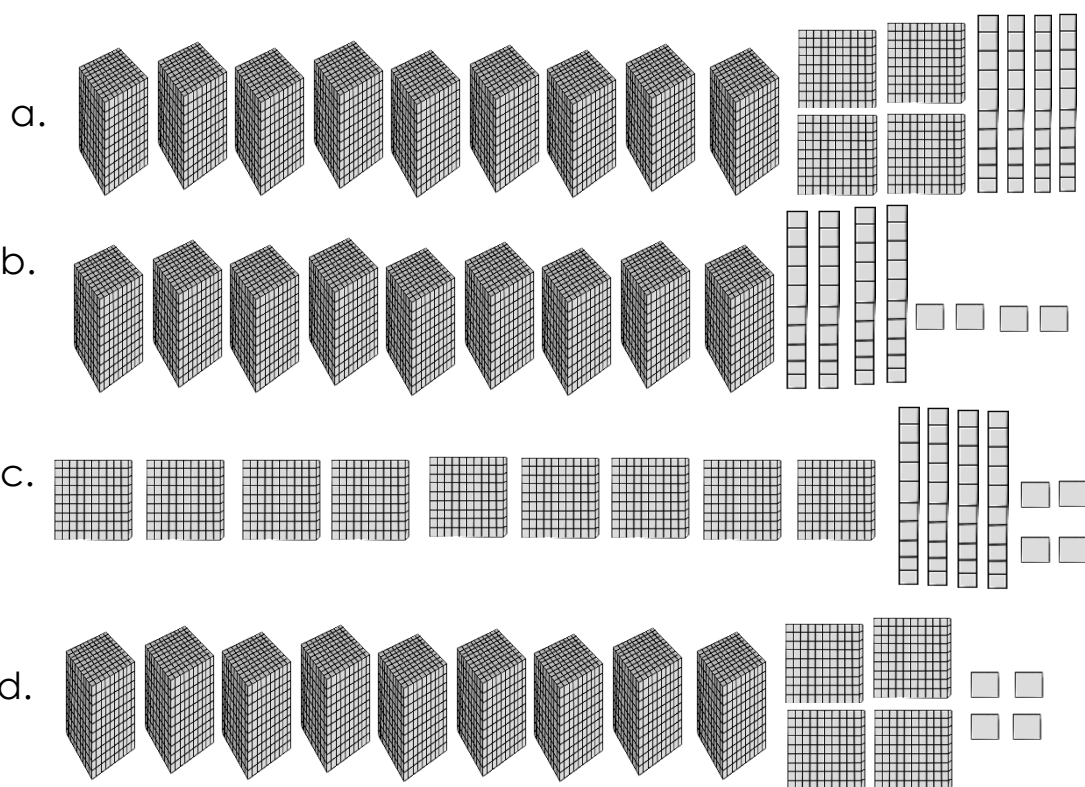


- a. 3 223 b. 2 342 c. 4 204 d. 3 224

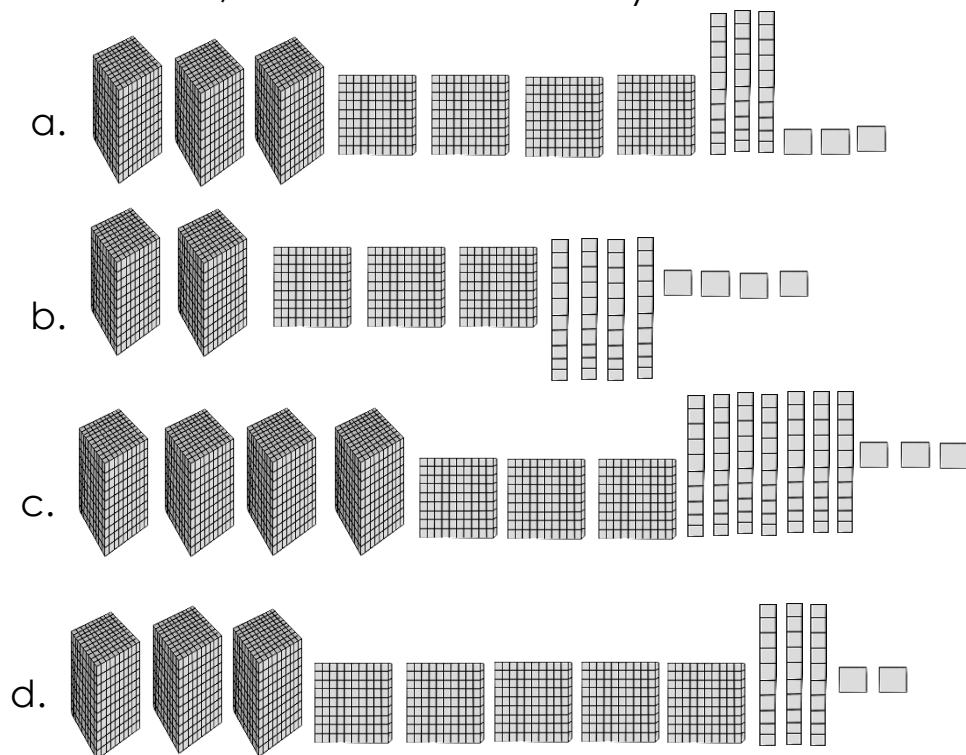
3. Which set of number discs represents 4 500?



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



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





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

<p>What I Know</p> <p>1. C 2. D 3. C 4. B 5. C</p>	<p>What's In</p>	<p>What's More</p> <p>Activity 1</p> <p>8 000, 500, 80 and 3</p> <p>8 583</p> <p>Activity 2</p> <p>1. 3 365 2. 8 139 3. 4 373 4. 6 002 5. 3 221</p>
<p>What I Can Do</p> <p>Activity</p> <p>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</p>	<p>Assessment</p> <p>1. B 2. D 3. C 4. B 5. C</p>	<p>Additional Activity</p> <p>A.</p> <p>1. 3 433 2. 2 354 3. 4 373 4. 3 532 5. 4 334</p> <p>B.</p> <p>1. 9 thousands discs, 8 hundreds discs, 4 tens discs and 3 ones discs. 2. 8 blocks, 5 flats, 3 longs and 4 squares</p>

References

Department of Education. *Mathematics-Grade 3: Teacher' Guide* 1st ed. 2015, 1-10.

Department of Education. *Mathematics-Ikatlong Baitang: Kagamitan ng Mag-aaral sa Sinugbuanong Binisaya* 1st ed, 1-10.

Visualizing Numbers up to 10 000, Math for Grade 3.

BEAM LG Gr. 3 Module 1/Whole

Numbers. <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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