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DepED
DEPARTMENT OF EDUCATION

Mathematics

Quarter 1 – Module 1:
Numbers and Number Sense

SELF-LEARNING MODULE

DEPARTMENT OF EDUCATION - SOCCSKSARGEN

MATHEMATICS – Grade IV
Self-Learning Module (SLM)
Quarter 1 – Module 1: Numbers and Number Sense
First Edition, 2020

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Introductory Message

For the facilitator:

Welcome to the Mathematics – Grade IV_Self-Learning Module (SLM) on **Numbers and Number Sense!**

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 – Grade IV Self-Learning Module (SLM) on **Numbers and Number Sense!**

The hand is one of the most symbolized part of the human body. It is often used to depict skill, action and purpose. Through our hands we may learn, create and accomplish. Hence, the hand in this learning resource signifies that you as a learner is capable and empowered to successfully achieve the relevant competencies and skills at your own pace and time. Your academic success lies in your own hands!

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled 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. This also tends retention of learned concepts.
 ***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 it!

What I Need to Know

This module was designed and written with you in mind. It is here to help you master the **Numbers and Number Sense**. The scope of this module permits it to be used in many different learning situations. The language used recognizes the diverse vocabulary level of students.

The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook you are now using.

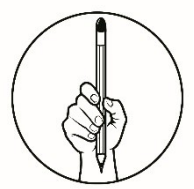
Before answering the different activities, may we remind you to please wash your hands, sanitize your ballpens, calculators, pencils, and other gadgets. Always remember to keep safe, wear your mask and maintain social distancing.

The module is divided into four lessons, namely:

- Lesson 1- Visualizing numbers from 100,000 with emphasis on 10 001 to 100,000.
- Lesson 2 – Place Value and Value of digits in numbers up to 100 000.
- Lesson 3 - Reading and Writing Numbers in symbols and in words up to hundred thousands.
- Lesson 4 – Comparing Numbers up to 100 000 using symbols

After using this module, you are expected to:

1. Visualize numbers from 10,001 to 100,000.(**M4NS-Ia-1)**
2. Value and Place Value. **(M4NS1a-10.1)**
3. Reads and Writes Numbers in symbols and in words up to hundred thousands and compare them using relation symbols. **(M4NS1a-9.1.1)**



What I Know

Read and understand each item, choose you correct answer.

1. What number is 10,000 less than 31,211?
   a. 21,200 b. 21,211 c. 21,210 d. 21,201
2. What number is represented by these discs?

   a. 1,500 b. 1,005 c. 1,050 d. 1,006
3. What number has 5 ten thousands, 6 thousands, 7 hundreds, 4 tens and 8 ones?
   a. 54 679 b. 56 478 c. 56 748 d. 57 648
4. Encircle the letter of the number with a 5 in the thousands place?
   a. 45 304 b. 51 760 c. 76 542 d. 93 227
5. In 92 165, give the value of the digit in the ten thousands place?
   a. 20 000 b. 50 000 c. 60 000 d. 90 000
6. The number word for 78,020 is _____.
   a. seven eight thousand, twenty
   b. seventy-eight thousand, twenty
   c. seventy-eight thousand, two hundred
   d. seventy-eight thousand, two
7. The number symbol for ninety-nine thousand, twelve is _____
   a. 99 012 b. 909 012 c. 99 102 d. 99 021
8. What symbol should be used to make the equation 23 000 ____ 23 006 correct?
   a. < b. > c. = d. ≠
9. Which statement is correct?
   a. 5 000 > 5 326 c. 5 328 > 5 303
   b. 5 120 = 5 623 d. 5 934 < 4 205
10. The number 89,098 is read as _____.
    a. eighty-nine thousand, nine hundred eight
    b. ninety-eight thousand, ninety-eight
    c. eighty-nine thousand, nine hundred eight
    d. eighty-nine thousand, ninety-eight

Lesson 1 Visualize numbers up to 100,000 with emphasis on numbers 10,001 – 100,000

Hi kids a pleasant day to start with a module! Hope you have fun and enjoy the following activities.

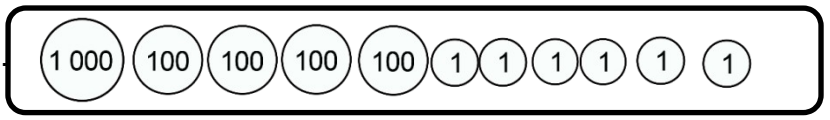
Learning Objectives:

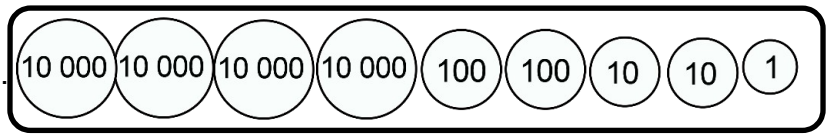
1. Visualize numbers up to 100 000 with emphasis on numbers 10 001 – 100 000
2. Illustrate / Draw a number disc to show the numbers.
3. Use leisure time wisely.

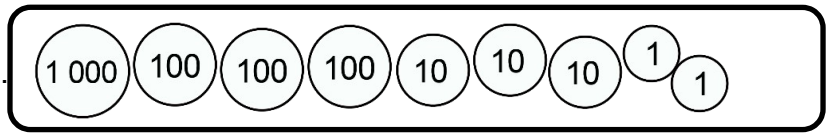
What's In

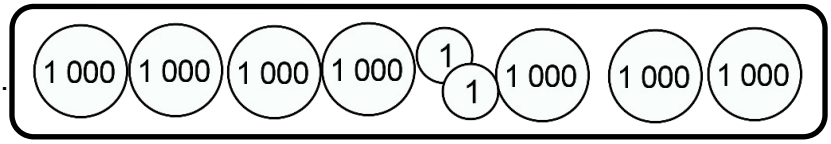
A. Match Column A with Column B.
Write the letter of the correct answer before the number.

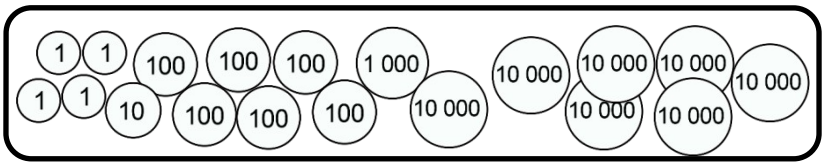
Column A *Column B*

____ 1. 

____ 2. 

____ 3. 

____ 4. 

____ 5. 

a. 1,332

b. 2,405

c. 40,221

d. 71 614

e. 7,002

f. 1,406

What's New

Ian and his friends enjoy watching their favorite football game on television. They are surprised with how big the sport's ground is where this game is being held. They want to know how many people the sports ground could accommodate. So when the announcer announces that 12,645 people watch the game. They are really surprised.

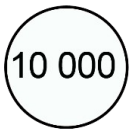
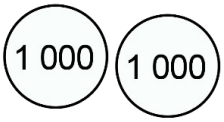
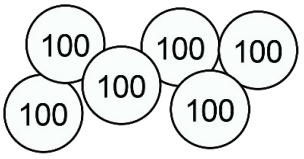
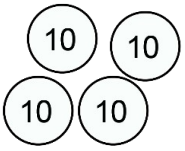
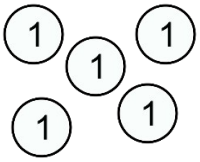
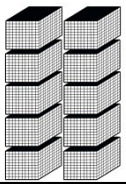
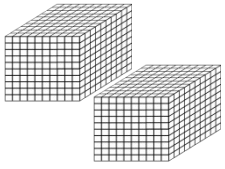
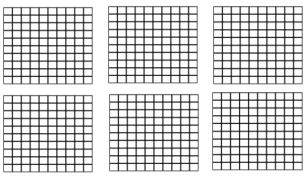
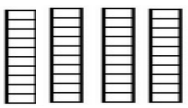
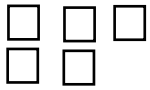
Questions:

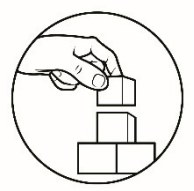
1. How do you feel when you have some fun with friends? _____
2. It is good to be friendly? _____
3. Who watched the football game? _____
4. How many people came to watch the game? _____
5. Do you know how big these number? _____

What is It

In visualizing numbers, we used number discs or by logs, blocks, flats, longs, and units.

Can you imagine how big the number **12 645** is?
Two ways to represent the numbers are shown below.

Using the number discs				
				
Using the logs(10 000), blocks (1 000), flats (100), longs (10), and units (1)				
				
One 10,000	Two 1,000s	Six 100s	Four 10s	Five 1s
10,000	2,000	600	40	5
12 645				

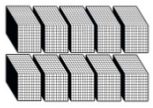
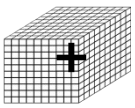
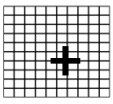
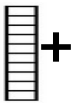


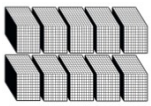
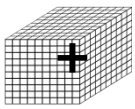
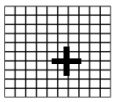
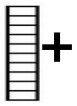
What's More

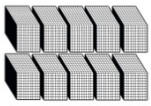
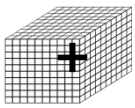
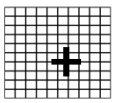
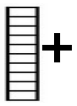
Let us try to answer more challenging problem and activities about visualizing members from 50,001 to 100,000.

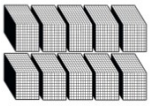
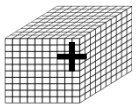
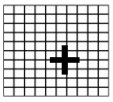
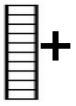
A. Choose the number that is represented by each illustration.
Write the letter of the correct answer before the number.

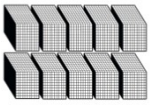
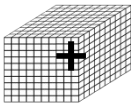
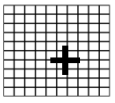
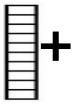
a. 69,265	c. 92,637	e. 82,394
b. 97,685	d. 88,496	f. 74,828

____ 1.) 8  8  4  9  6 □ +

____ 2.) 6  9  2  6  5 □ +

____ 3.) 8  2  3  9  4 □ +

____ 4.) 9  7  6  8  5 □ +

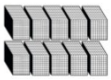
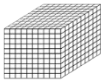
____ 5.) 7  4  8  2  8 □ +

B. Match the numbers in Column A with their representation in Column B.

Column A	*Column B*
____ 1.) 73,465	a. 9  + 2  + 5  + 8  + 4 □
____ 2.) 85,108	b. 7  + 3  + 4  + 6  + 5 □
____ 3.) 92,584	c. 8  + 5  + 1  + 0  + 8 □
____ 4.) 76,387	d. 8  + 1  + 2  + 8  + 5 □
____ 5.) 81,285	e. 8  + 1  + 3  + 8 + 5 □
	f. 7 + 6 + 3 + 8 + 7 □

What I Have Learned

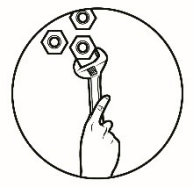
Write the number of logs, blocks, flats, longs, units, and number discs

Numbers	Logs 	Blocks 	Flats 	Longs 	Units 
1. 72,694					
2. 63,042					
3. 78,546					

Draw number discs to visualize the given number.

4. 56 651

5. 23 501 =



What I Can Do

A. Use number discs to show the numbers

1. There were 36,567 tourist who came to the country last month
2. About 45,000 people went to Palawan last month.

B. Draw numbers discs to show these numbers

1. There are 27,341 people affected by flood.
2. The city mayor went 3,762kg of rice to the evacuees.

Additional Activities

Do what item tells you to do. Write the numbers that is:

1. 20,000 more than 24,658. _____
2. 20,000 more than 18,459. _____
3. 1,000 less than 50,000 _____
4. 1,000 less than 48,750 _____
5. 30,000 less than 49,999 _____

Lesson 2 Place Value and Value of a Digit in Numbers up to 100 000

Did you wash your hands kids? Well done! Today, we will have another activities that will help you learn the value and place value of a number.

Learning Objectives:

1. Give the place value and value of a digit in numbers up to 100 000.
2. Write the place value and value of a digit in numbers up to 100 000.
3. Show interest and concern to those who are in need especially in this time of pandemic.

What's In

Let's play the game "Number Match Up". It's all about the interesting lesson on visualizing numbers that I have learned from the previous module.

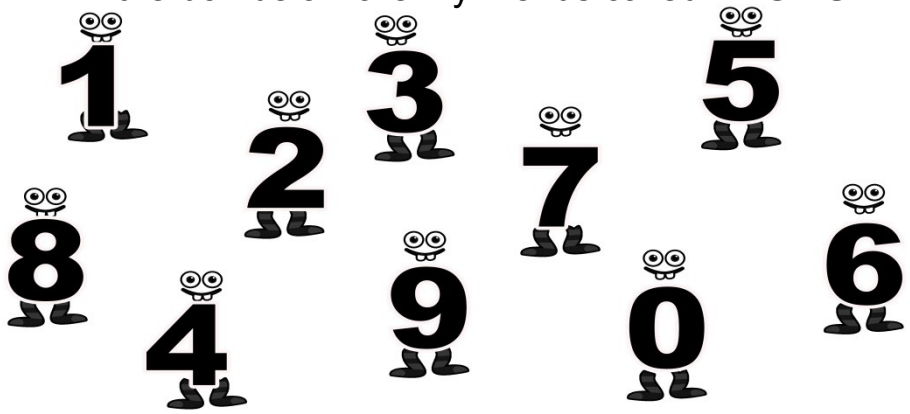
Match the number in Column A with their representations in Column B. Write the letter on the space provided.

Column A	*Column A*
___1) 52 483	a. 3 + 8 +2 + 1 + 7 ☐
___2) 43 105	b. 7 + 5 +3 + 4 + 8 ☐
___3) 75 348	c. 5 + 4 +5 + 9 + 6 ☐
___4) 54 596	d. 5 + 2 +4 + 8 + 3 ☐
___5) 38 217	e. 4 + 3 +1 + 0 + 5 ☐

What's New

This module focuses on the place value and value of each digits in a number. The value of each digit depends on its position that it occupies in a larger number.

In the box below are my friends called "**DIGITS**".



They can be combined to form different group of **numbers**.

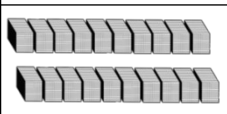
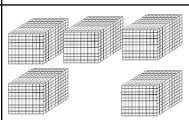
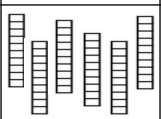
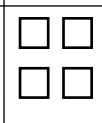
Let us study this example:

JMSA Foundation donated 25 364 food packs which include half-sack of rice, canned goods, noodles and a tray of eggs to the residents of Barangay Glamang who were affected by the ongoing enhanced community quarantine because of the COVID-19 threat

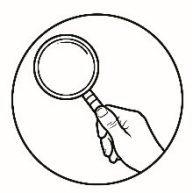
.

Here is a place value chart to help you understand the **place value** and **value** of each digit in **25 364**.

PLACE VALUE CHART

Place Value →	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
						
digit →		2	5	3	6	4
value →		20 000	5 000	300	60	4
standard form →	**25 364**					

Questions: a. What is the digit in the ten thousands place? _____
b. What is the digit in the thousands place? _____
c. What is the digit in the hundreds place? _____
d. What is the digit in the tens place? _____
e. What is the digit in the ones place? _____
f. How many digits are there the number 25 364? _____



What is It

Let us go deeper on the meaning of place value and value of the digits within a larger number. There are also some important terminologies you must learn and remember about our topic.

There are 40,418 families of transport network vehicle service (TNVS) and public utility vehicle (PUV) drivers who were affected by the ongoing enhanced community quarantine because of the COVID-19 threat who received the cash assistance of the government's Social Amelioration Program (SAP). *Source: Manila Bulletin,05/12/2020*

The place value chart can help you understand the value of each digit.

	PLACE VALUE CHART					
Place value ➡	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	100 000	10 000	1 000	100	10	1
Digits ➡		4	0	4	1	8
(multiply the digit by its place value) ➡		4 x 10 000	0 x 1 000	4 x 100	1 x 10	8 X 1
Value ➡		40 000	0	400	10	8
Expanded form ➡		40 000 + 0 + 400 + 10 + 8				
Standard Form ➡	**40 418**					

Give the place value and the value of the digit 5 in the given number. The first problem is done for you.

		Place Value	*Value*
	54 219	**ten thousands**	**50 000**
1)	83 658	_____	_____
2)	75 104	_____	_____
3)	20 531	_____	_____
4)	49 825	_____	_____
5)	69 359	_____	_____

What's More

Let us try to answer more challenging set of problems and activities about the place value and value of the digits in a number.

A. Write the place value and value of the digit in the number 84 569.

		Place Value	*Value*
1)	8	_____	_____
2)	5	_____	_____
3)	4	_____	_____
4)	9	_____	_____
5)	6	_____	_____

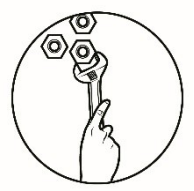
B. Write the missing numbers on the blank.

1. 57 548 means 50 000 + 7 000 + _____+ 40 + 8
2. 42 697 means 40 000+ _____+ 600 + 90 + 7
3. 86 432 means 80 000 + 6 000 + 400 + ____+ 2
4. 93 081 means 90 000 + 3 000 + _____+ 80 + 1
5. 46 509 means _____ + 6 000 + 500 + 9

What I Have Learned

Fill in the blanks with the correct word would make the statement true.

Place value refers to the _____ of a digit that determines it's _____ in a given number. It helps in reading and writing numbers.



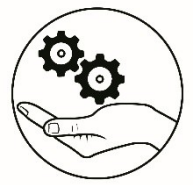
What I Can Do

Here is another activity that lets you apply what have you learned about the Place Value and Value of a Number by relating it to real-life situations.

To stop the virus from spreading, my family decided to solicit hand soaps and bottles of alcohol from our generous friends and donated the said items to the people in our barangay. We collected 97 378 hand soaps and 100 000 bottles of alcohol.

Comprehension Check:

What is the highest place value in the number 97 378? _____
What is the highest place value in the number 100 000? _____
Did my family collect more hand soaps than bottles of alcohol?___
Why is it important to wash our hands? _____



Additional Activities

Let us play "**HULA-BIRA**"

Hula-Bira - it is a Pinoy version of a guessing game.
I will be giving you clues to determine the number.

What number is it based on the clues?

1. What is the smallest 5-digit number without repeating digit?
2. What is the largest 5-digit number that contains the digits 8, 6, 0, 9, and 2?
3. What new number will be formed if the ten thousands digit of the number 47 682 is increased by 5 and the tens digit is decreased by 3?

***Amazing**! You did a good job in applying what you have learned!*

Lesson 3 READING AND WRITING NUMBERS IN SYMBOLS AND IN WORDS UP TO HUNDRED THOUSANDS

Hi kids, I hope you are ready now. I know you enjoyed our activities yesterday. This time, we will learn more and I know you will like it more!

Learning Objectives:

1. Read and write numbers up to 100 000 in symbols and in words correctly.
2. Write numbers up to 100 000 in symbols and in words correctly.
3. Appreciate the importance of backyard gardening.

What's In

A pleasant day to start with another module! Do you know that there are rules in reading and writing numbers? After using this module, you are expected to read and write numbers up to hundred thousand in symbols and in words. (**M4NS-Ia-9.4).**

In your previous lesson, you have learned the **place value** and the **value** of each digit in a number as shown.

PERIODS					
THOUSANDS			**UNIT**		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
	9	**8**	**9**	**0**	**2**

Write : **98 902**

Read: **Ninety-eight thousand, nine hundred two.**

Remember:

1. To read a five-digit number, we must separate the digits by periods.
2. The number formed by the digits in one period are read together, along with the name of the period.
3. Starting from the right, separate the unit period from the thousands period by providing a space or writing a comma after three places.
4. Numbers are written in words in the same way that they are read.

What's New

This module focuses on reading and writing numbers up to hundred thousands in symbols and in words. Study the situation below and answer the questions that follow.

The Department of Agriculture in Region XII intensified the promotion of vegetable planting amidst the COVID-19 crisis. They donated different variety of vegetable seeds to every household in the entire region. The total number of vegetable seeds donated was 49, 575.

Questions:

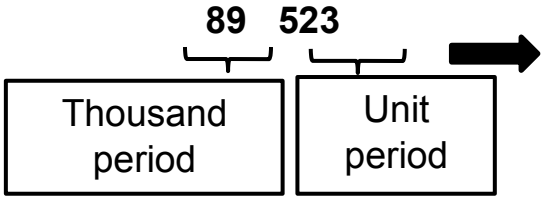
1. What agency intensified the promotion of vegetable planting in Region 12?
2. What are the possible vegetable seeds were donated?
3. Why it is important to plant vegetables in our backyard?
4. How many vegetable seeds were donated by the agency? (Write the figure)
5. How do you read this figure? (Write it in words)

What is It

Below are the following rules to read and write whole numbers:

RULE 1: Read each group of digits from left to right, then say the name of the group or period except in the unit period.

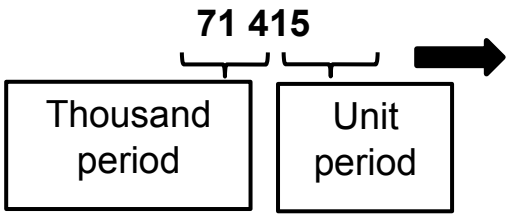
EXAMPLE: Read **89 523**.



Notice that, we have 89 in the thousand period, and 523 in the unit period. So, it is read as "**eighty-nine thousand, five hundred twenty-three**". Remember, numbers are written in words in the same way that they are read.

RULE 2: Starting from the right, separate the unit period from the thousand period by providing a space or writing a comma after three places.

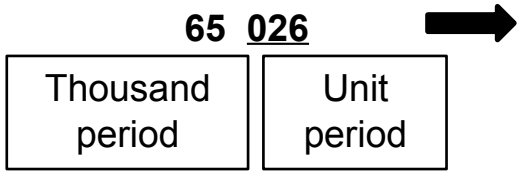
EXAMPLE: Write "**seventy-one thousand, four hundred fifteen**" in symbol.



Notice that, from the right, count 3 digits or the unit period, then separate it to the thousand period by providing a space or comma. So, it is written as **71 415** or **71, 415**.

RULE 3: When writing numbers in symbols, use zero as a place holder.

EXAMPLE: Write "**sixty-five thousand, twenty-six**" in symbol.



The **zero** in the hundreds place has no value, but it is needed to hold the hundreds place. Always remember that it must contain three digits before you begin entering digits in the thousands period.

What's More

Let us try to answer more challenging set of problems and activities about reading and writing numbers up to 100 000.

A. Complete the table by writing the missing symbols and words.

	SYMBOL	WORDS
1.	**26 905**	
2.		***Seventy-one thousand, nine hundred eleven***
3.	**65 008**	
4.		***Fifty thousand, nine***
5.	**94 012**	

B. Match the numbers in symbols with the corresponding numbers in words. Write the letter of your answer on the space provided.

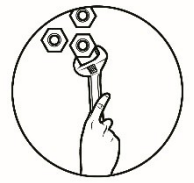
_____1.) 87 901	a.) eighty-one thousand, three hundred
_____2.) 90 875	b.) seventy-five thousand, two
_____3.) 75 002	c.) eighty-seven thousand, nine hundred one
_____4.) 81 300	d.) sixty-five thousand, two hundred five
_____5.) 65 205	e.) ninety thousand, eight hundred seventy-five

What I Have Learned

Here is another activity that lets you apply what you have learned about reading and writing numbers up to 100 000. Fill in the blanks with the correct word that would make the statement true.

When **READING NUMBERS** up to 100 000, read each group of digits from _____ to _____, then say the name of the period except in the _____period.

When **WRITING NUMBERS** up to 100 000, separate the unit period from the thousand period by providing a _____ or _____ after three places. Use _____ as a place holder.



What I Can Do

Here is another activity that will help you apply what you have learned about Reading and Writing Numbers by relating it to real-life situations. Write it in symbols and in words

1. What is the largest 5- digit number using different digits?

Symbol: _____

Words: _____

2. What number comes after 36 459?

Symbol: _____

Words: _____

3. What is the smallest 5-digit even number using the digit only once?

Symbol: _____

Words: _____

4. What number comes before 70 990?

Symbol: _____

Words: _____

5. Using the digits 3, 2, 8, 1, and 5 only once, form a largest 5 digit even number.

Symbol: _____

Words: _____

Additional Activities

Write the following numbers in symbols.

_____1.) Ninety-eight thousand, six hundred twenty.

_____ 2.) One hundred thousand

_____ 3.) Seventy-one thousand, six hundred eighty two

_____ 4.) Sixty thousand, three.

Good job! Prepare for the next lesson

Lesson 4 Comparing Numbers up to 100 000 using Relation Symbols

How are you kids? How do you find your day today than yesterday? Hope it is happier today.

Learning Objectives:

1. Compares numbers up to 100 000 using relation symbols
2. Writes relation symbols such as >, <, or = in comparing numbers
3. Shows dedication in works

What's In

In your previous lesson, you have learned that place value gives the position of a digit in a given number and the value tells us the worth of a digit.

The value of the digit on the right of a given digit in the place value chart is ten times less than that of the given digit.

Example:

Place Value	Ten Thousands	Thousands	Hundreds	Tens	Ones
98 641	9	8	6	4	1

Look at the table above, identify the place value of the following numbers. What is the place value of 1 ?, 8?, 9?,4?,and 6?

Multiple Choice. Select the letter of the correct answer.

1. In the number 30 782, the digit 3 is in the _____ place.
   a. thousands b. ten thousands c. hundreds d. tens
2. In the number 24 560, the digit 4 is in the _____ place.
   a. ten thousands b. hundreds c. thousands d. tens
3. In the number 68 249, the digit 2 is in the _____ place.
   a. ones b. ten thousands c. hundreds d. tens

4. In the number 35 072, the digits 7 is in the _____ place.
   a. thousands b. ten thousands c. hundreds d. tens
5. The number 32 648, the digit 8 is in the _____ place
   a. ones b. thousands c. hundreds d. tens

What's New

Today you are going to learn about comparing numbers up to 100,000 using relation symbols.

Read the problem below.

Mang Tony is a fisherman. Yesterday he harvested 17,845 kilograms of Tilapia. Today he harvested 17,546 kilograms of Tilapia. Which day he harvested more?

Questions:

1. How many kilograms of Tilapia were harvested yesterday?
2. How many kilograms of Tilapia are harvested today?
3. What is asked in the problem?
4. What day did harvested less?
5. How will you find the answer to the problem?
6. What kind of person is Mang Tony is?

What is It

Discussion:

We used to compare numbers to determine which number is greater , less or equal using relation symbols, such as greater than (**>**), less than (**<**) and equal to (**=**).

How to determine which number is greater than, less than or equal to? Follow the steps below to find out.

STEPS IN COMPARING TWO NUMBERS

1. Align the digits with the same place value.
Example: **17 546** and **17 845**

17 546
17 845 } align

2. Compare the digits in each place value starting from the left. The first pair of digits that are different values will determine which number is greater or less.

STEP 1	STEP 2	STEP 3
Compare the digits in the ten thousand's place **1**7 546 **1**7 845 Same digits in the ten thousand's place	Compare the digits in the thousand's place **1**7 546 **1**7 845 Same digits in the thousand's place	Compare the digits in the hundred's place 17 **5**46 17 **8**45 Since 8>5 .therefore, **17 845 > 17 546**.

Below are important terminologies, notations and symbols that you must learn and remember about comparing numbers using relational symbols.

The symbol **>** is read as ***"is greater than"*** and is used when the number on the left is larger than the digit in the right.

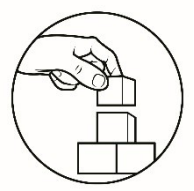
Examples: a. 4 **3**54 **>** 4 **2**05
b. 7**4** 385 **>** 7**1** 493

The symbol **<** is read as ***"is less than"*** and is used when the number on the left is less than the number on the right.

Examples: a) 9 **6**74 **<** 9 **7**89
b) 1**2** 583 **<** 1**3** 002

The symbol **=** is read as ***" is equal to"*** or ***"equals"*** and is used when the number on the left is of the same value with the number on the right.

Examples a) 4 273 = 4000 + 200 + 70 + 3
b) 5 650 = 5000 + 650



What's More

Let us try to answer more challenging set of problems and some activities about comparing numbers.

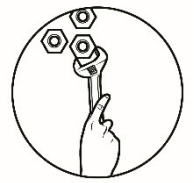
1. Which is greater 19 567 or 19 765?
2. Ana walks to school 5 200 seconds a day while Lorna walks 5 150 seconds every day. Who spends more time in walking?
3. The house of Maricar is 3 500 meters away from the church, while Tonet lives 6 500 meters away from it. Who lives farther from the church?

What I Have Learned

Here is another activity that you can apply on what you have learned about comparing numbers up to 100 000 using relation symbols. How do you compare numbers using relation symbols? Fill in the blanks with the correct word/s or symbol that would make the statement true.

The value of digit to the right of any given digit in the place value chart is _____ than that digit.

- The symbol > is read as" ____ and the symbol < is read as _____.
- The symbol _____ means "is equal to".



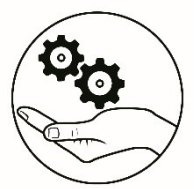
What I Can Do

Here is another activity that you do where you can apply what you have learned about comparing numbers up to 100 000 by relating it to your experiences in real life situations.

Read and answer the question correctly:

In 2015, the population of Lapaz City was 32 275, this year 2020, its population is 43 426. In what year did it had less population?

Answer: _____



Additional Activities

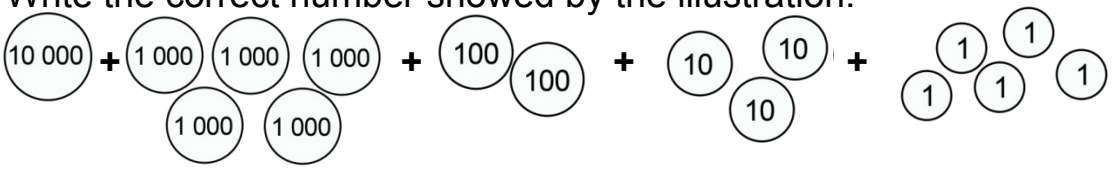
Read and analyze the given situation. Then solve what is asked.

If there are 50 320 Lips candies in a box and 50 408 Lollipops in another box. Which box has more candies?

Assessment

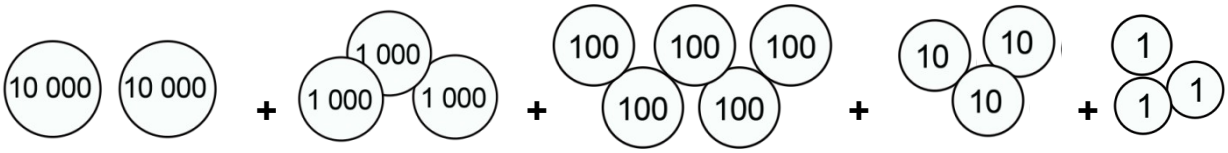
Read and understand the situations carefully.
Choose the letter of the correct answer in the blank.

1. Write the correct number showed by the illustration.



a. 15 000 b. 15 352 c. 15 253 d. 15 235

2. What number is 10 000 more than 13 533?



a. 23 503 b. 23 530 c. 23 533 d. 23 500

3. What symbol should be used to make the equation
65 101 ____ 65 011 correct?

a. > b. < c. = d. ≠

4. Which statement is correct?

a. 3 000 > 3 101
b. 25 004 = 25 400
c. 45 352 < 45 353
d. 16 205 ≠ 16 205

5. In 72 165, give the value of the digit in the thousands place?

a. 2 000 b. 5 000 c. 6 000 d. 9 000

6. A private institution donated 59 482 Personal Protective Equipment (PPEs) among the COVID-19 frontliners in Region XII. What is the place value of the digit 5 in the number 59 482?

a. Tens b. Hundreds c.Thousands d.Ten Thousands

7. How is the digit 2 in the number 57 243 is related to digit 2 in the number 96 251?

a. Both have a value of 20.
b. Both have a value of 200.
c. Both have a value of 2 000
d. Both have a value of 20 000.

8. The number 89,198 is read as _____.

a. eighty-nine thousand, nine hundred eight
b. ninety-eight thousand, ninety-eight
c. eighty-nine thousand, nine hundred eight
d. eighty-nine thousand, one hundred ninety-eight

9. Which number symbol is read as seventy-three thousand, nine hundred four?

a. 73,094 b. 73,940 c. 73,904 d. 73,409

10. What is the number word for 96,989?

a. ninety-six thousand, nine hundred ninety-eight
b. ninety-six thousand, nine hundred eighty-nine
c. sixty-nine thousand, nine hundred eighty-nine
d. ninety-six thousand, nine hundred ninety-eight

Answer Key

ASSESSMENT

1. d 2.c 3. a 4. c 5. a 6. d 7. b 8. d 9. c 10. b

Lesson 4

What's In

1. b 2. b 3. c
4. c 5. a

What's New

1.17 845
2.17 546
3. What day he harvested more?
4.Today
5.by comparing
6. Industrious

What's More

1. 19,765
2. Ana
3. Tonet

What I Have Learned

- Less than
- Greater than
- Less than
- Equal (=)

What I Can Do

2015

Additional Activity

Box with lollipops.

Lesson 3

What's New

1. Department of Agriculture
2. Pechay, Radish, Ampalaya and other vegetables
3. to have fresh vegetables and to save money
4. 49 575
5. Forty-nine thousand, five hundred seventy-five

What's More

A.1. twenty-six thousand, nine hundred five
2. 71 911
3. Sixty-five thousand, eight
4. 55 009
5. ninety-five thousand, twelve

B.1. c 2. e
3. b 4. a
5. d

What I Have Learned

Left
right
comma or space
zero (0)

What I Can Do

1) 98 620
Ninety-eight thousand, seven hundred sixty-five
2) 36 460
Thirty-six thousand, four hundred sixty
3) 10 234
Ten thousand, two hundred thirty-four
4) 70 889
Seventy thousand, eight hundred eighty-nine
5) 85 312
Eighty-five thousand, three hundred twelve.

Additional Activity

1) 98 620
2. 100 000
3. 7 682
4. 6 003
5. 25 109

Lesson 2

What's In

1. d 2. e 3. b
4. c 5. a

What's New

a. 2
b. 5
c. 3
d. 6
e. a
f. 5

What Is It

1. tens - 50
2. thousands – 5 000
3. hundreds - 500
4. ones - 5
5. tens - 50

What's More

A1. ten thousands – 80 000
2. hundreds - 500
3. thousands – 4 000
4. ones - 9
5. tens – 60

B.1. 500
2. 2 000
3. 30
4. 0
5. 40 000

What I Have Learned

- Place
- value

What I Can Do

1. ten thousands
2. hundred thousands
3. no
4. to keep us safe and healthy

Additional Activity

1. 10 234
2. 98 620
3. 97 652

Lesson 1

What's In

1. f 2. c 3. a
4. e 5. d

What's New

1. Happy/Enjoy
2. Yes
3. Ian and his friend
4. 12 645
5. Yes

What's More

A1. d B1.b
A2. a B2.c
A3. e B3.a
A4. b B4. f
A5. f B5.d

What I Have Learned

1. 7=logs, 2=blocks, 6=Flats, 9=longs 4=units
2. 6=logs, 3=blocks, 0=Flat, 4=longs, 2=units
3. 7=logs, 8=blocks, 5=Flats, 4=longs, 6=units
4.5=10000, 6=1000, 6=100, 5=10 1=1
5.2=10000, 3=1000, 5=100, 0=10 1=1

What I Can Do

A1.
A2.
B1.
B2.

Additional Activity

1.44 648
2.38 459
3.49 000
4.47 750
5.19 999

What I need to Know

1. b 2. b 3. a 4. c 5. c 6. d 7. d 8. b 9. c 10. d

References

Books:

Tabilang, A., Arce, I., Pascua, R., Calayag, N., Dacuba, L., Borais, D., Buemia, R., Collao, M., Morandante, L., Danao, A., Gonzaga, L., Brione, I. and Daganta, A., 2015. *Mathematics 4 Teachers Guide*. 1st ed. Pasig City: Lexicon Press, Inc.

Chingcuangco, Odelia G. *Soaring High With Mathematics 4 Teachers Manual*, 2019.

Barlow, Jim. *Steck-Vaughn Pre-GED Mathematics*. Reprint, Austin, TX: Steck-Vaughn Co., 2000.

Creag, H., 2019. *Real-Life Mathematics Grade 4*. 1st ed. Quezon City: ABIVA PUBLISHING HOUSE, Inc., pp.2-6.

Web Links

Saddleback.Edu, 2020.
https://www.saddleback.edu/faculty/lperez/algebra2go/alliedhealth/digitspv001.pdf.

DISCLAIMER

This Self-learning Module (SLM) was developed by DepEd SOCCSKSARGEN with the primary objective of preparing for and addressing the new normal. Contents of this module were based on DepEd's Most Essential Learning Competencies (MELC). This is a supplementary material to be used by all learners of Region XII in all public schools beginning SY 2020-2021. The process of LR development was observed in the production of this module. This is version 1.0. We highly encourage feedback, comments, and recommendations.

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