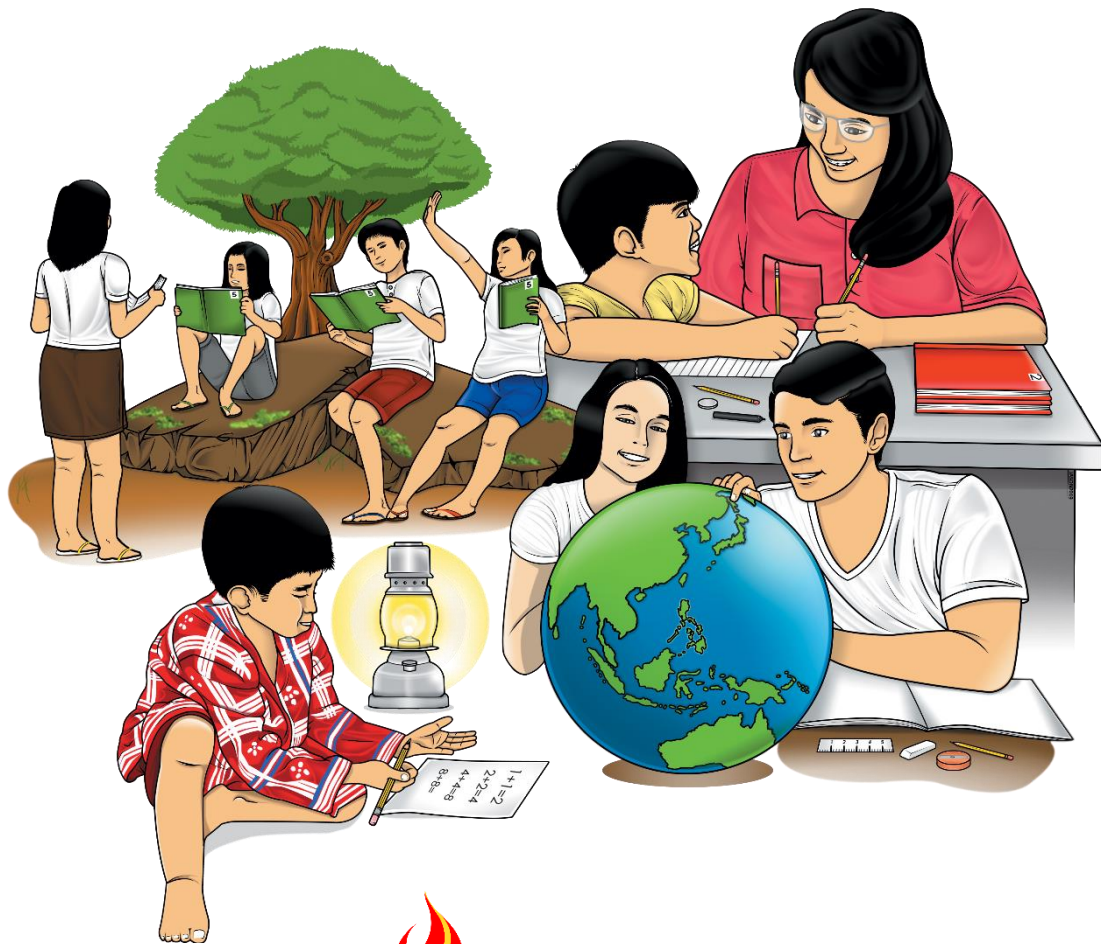**4**

Mathematics
Quarter 1 – Module 2:
Whole Numbers Up to 100 000

Mathematics – Grade 4
Alternative Delivery Mode
Quarter 1 - Module 2: Whole Numbers Up to 100 000
First Edition, 2020

4

Mathematics
Quarter 1 – Module 2:
Whole Numbers Up to 100 000

DepED

DEPARTMENT OF EDUCATION

Introductory Message

For the facilitator:

Welcome to Mathematics Grade 4 Alternative Delivery Mode (ADM) Module on Whole Numbers Up to 100 000!

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 4 Alternative Delivery Mode (ADM) Module on Whole Numbers Up to 100 000!

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; 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 fill on the 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 it!

What I Need to Know

Good day learner! You already know how to read and write numbers up to ten thousand. This time let's make it bigger. In this module, you will learn how to give the place value and value of a digit in numbers up to 100 000. You will also read and write numbers up to hundred thousand. I know you will feel great after doing the activities in this module.

After going through this module, you are expected to:

1. give the place value and value of a digit in numbers up to 100 000; and
2. read and write numbers up to hundred thousand in symbols and in words.

What I Know

Draw 🙂 if the statement is correct and 🙁 if it is incorrect.

1. The place value of 8 in 65 875 is *hundreds*.

2. The value of the underlined digit in 5<u>7</u> 329 is *7 000*.

3. 64 231 means *sixty-four thousand, two hundred thirty-one*.

4. Eighty-four thousand, six hundred nine when written in symbol is *84 906*.

5. 6 ten thousand, 4 thousands, 2 hundreds, 9 tens, 5 ones when written as one number is *64 295*.

6. There are two ten thousands in 82 654.

7. In *nine thousand, six hundred twenty-eight*, the digit in the tens place is 2.

8. If 6 thousands, 4 ten thousands, 8 tens, 5 ones and 3 hundreds are arranged in their right places, the resulting number is 64 583.

9. In the number *eighty-one thousand, seven hundred thirty-five*, if the digit in the hundreds place is removed, the resulting number is 81 035.

10. The digit 6 has a higher value in 86 432 than in 61 345.
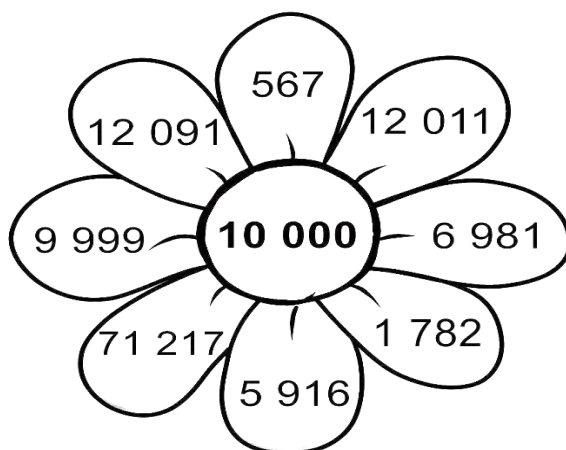
Are you done answering?

If yes, time to check. Please go to page 13 for the ***Answer Key***.

What's In

Do you remember how to read and write numbers up to 10 000? Let us have a review.

A. Copy the numbers that are less than the number indicated in the circle.

567
12 091
12 011
9 999 — 10 000 — 6 981
71 217
5 916
1 782

B. The following are numbers written either in symbols or in words. Write **True** if the number is correctly written in its corresponding symbol or words. Write **False** if it is not written correctly.

1. 3 912 - Three thousand, nine hundred twelve

2. 1 410 - One thousand, one hundred forty-one

3. Eight thousand, one hundred sixty-three- 8 163

4. Four thousand, nine hundred twenty-one -4 219

5. Seven thousand, three hundred eighty-two - 7 382

Are you done answering?

If yes, time to check. Please go to page 13 for the *Answer Key*.

What's New

Read the problem.

The boy scouts and girl scouts of Sorsogon City participated in a tree planting activity. They planted 62 453 seedlings.

1. What is the place value and value of each digit?
2. How do you read and write the number 62 453 in words and in symbol?

Answer the given problem.

What is It

You can answer the questions by giving the place value and the value of each digit and reading and writing the numbers in symbols and in words.

Let us see if we have the same answer. Read and follow the presentation. Then, let us check if you were able to read and write the numbers in symbols and in words correctly. Let us also find out if you were able to give the correct place value and value of each digit.

Study how 62 453 is written in the **Place Value Chart**.

PERIODS	THOUSANDS			UNITS		
Place Value	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Digits		6	2	4	5	3

The place value of 3 is **ones**. The value is **3**.

The place value of 5 is **tens**. The value is **50**.

The place value of 4 is **hundreds**. The value is **400**.

The place value of 2 is **thousands**. The value is **2 000**.

The place value of 6 is **ten thousands**. The value is **60 000**.

The value of a digit is determined by multiplying that digit by its place value.

62 453 is made up of *6 ten thousands*, *2 thousands*, *4 hundreds*, *5 tens* and *3 ones*. So, 62 453 = 60 000 + 2 000 + 400 + 50 + 3.

To read numbers up to hundred thousand:
1. *Separate the digits into periods (thousands and units).*
2. *From the left, read the number formed by the digits in the thousands period followed by the name of the period (**thousand**).*

3. Do the same with the units period without saying the name of the period.

62 453 is read as "sixty-two thousand, four hundred fifty-three".

Zeros are not read when they are used to hold the place value of non-zero digits.
Examples: 43 023 – Forty-three thousand, twenty-three
                80 701 – Eighty thousand, seven hundred one

Let's read these examples.

72 512 – Seventy-two thousand, five hundred twelve
14 926 – Fourteen thousand, nine hundred twenty-six
10 748 – Ten thousand, seven hundred forty-eight

To write numbers up to hundred thousand in symbols, we use space to separate the digits into periods or groups of three starting from the right.
- Thousands have two periods (thousands and units) – the units period should always be composed of three digits.
- Use zero as a place value holder of the missing digits in the units. They are written but not read.

Let's study these examples.
Ninety-two thousand, three hundred eighteen – 92 318
Forty-eight thousand, fifty-two – 48 052
Seventeen thousand, six – 17 006
Fifty-three thousand, one hundred two – 53 102

To write numbers in words, write them as they are read and use a comma to separate the thousands and units period.
Examples: 21 890 – Twenty-one thousand, eight hundred ninety
                75 326 – Seventy-five thousand, three hundred
                                twenty-six
                49 013 – Forty-nine thousand, thirteen

Now, you already learned the place value and value of a digit in numbers up to 100000 and how to read numbers up to hundred thousand. This time you are now ready for the activities. LET'S GO!
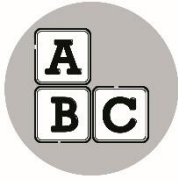
What's More

Activity 1

A. In the number 59 438, write the digit in the given place value.
1. Tens _____
2. Ones _____
3. Ten thousands _____
4. Thousands _____
5. Hundreds _____

B. Write the value of the underlined digit.
6. 14 <u>9</u>57 _____
7. <u>3</u>9 356 _____
8. 19 3<u>8</u>6 _____
9. <u>9</u>3 610 _____
10. 73 01<u>6</u> _____

Are you done answering?
If yes, time to check. Please go to page 13 for the *Answer Key*.

Assessment 1

Write the missing numbers.
1. 87 546 = 80 000 + _____ + 500 + 40 + 6
2. 98 923 = _____ + 8 000 + 900 + 20 + _____
3. 3 729 = 3 000 + _____ + _____ + _____
4. 60 000 + 2 000 + 400 + 30 + 8 = _____
5. 50 000 + 7 000 + 800 + 20 + 6 = _____
6. 9 000 + 400 + 8 = _____
7. 47 534 = 4 ten thousands, 7 thousands, ____ hundreds, 3 tens, 4 ones
8. 53 042 = 5 ten thousands, ____ thousands, 4 tens, 2 ones
9. 60 742 = __ ten thousands, 7 hundreds, ____ tens, __ ones
10. 45 982 = __ ten thousands, __ thousands, 9 hundreds, __ tens, 2 ones

Activity 2

A. Read and then write the following numbers in words.

1. 29 610 _____
2. 12 045 _____
3. 71 327 _____
4. 83 183 _____
5. 11 876 _____

B. Read and then write the following numbers in symbols.

6. Fifty-one thousand, two hundred forty-two _____
7. Eleven thousand, sixty-nine _____
8. Thirty-eight thousand, seven hundred fifty _____
9. Fourteen thousand, eighteen _____
10. Ninety thousand, nine hundred _____

Assessment 2

WHAT IS THE MESSAGE?

Directions. Complete each statement below. Write your answer in the second column of the table. Then, find the corresponding letter of your answer in the letter key and record it in the last column.

N - Ones	**F -** Tens	**E -** Ten Thousands
V - Sixty-four thousand, fifteen	**D -** 73 854	**I -** Thousands
	A - 8 000	**S -** 50 000
O - 95 374	**R -** Hundreds	

Statement	Answer	Letter
1. The place value of 5 in 67 953 is _____.		
2. 12 412 means 1 ten thousand, 2 thousands, 4 _____, 1 ten, 2 ones.		
3. In 98 356, 8 is in _____ place.		
4. The place value of 2 in 27 391 is ___		
5. The smallest place value of any whole number is _____.		
6. *Seventy-three thousand, eight hundred fifty-four"* when written in symbol is _____.		
7. The value of the underlined digit in 5̲2 071 is __.		
8. In *"twenty-eight thousand, four hundred,"* the value of "eight" is ___.		
9. There are 3 _____ in 59 381.		
10. The place value of 4 in 4̲9 106 is _____.		
11. The value of 2 in 13 528 is 20, its place value is ___.		
12. When written in symbol "ninety-five thousand, three hundred seventy-four" is _____.		
13. The place value of 7 in 38 710 is _____.		
14. In the number 32 901, the place value of 3 is __.		
15. 64 015 when written in words is _____.		
16. When value of a digit in a number is 50 000, its place value is _____.		
17. The place value of 3 in the numbers 12 378 ; 45 309 ; and 62 381 is _____.		

What I Have Learned

1. How do you give the place value and value of a digit in numbers up to 100 000?

   ✓ *The place value of a digit is determined using the **PLACE VALUE CHART.***

   ✓ *The value of a digit is determined by multiplying the digit by its place value.*

2. How do you read and write numbers up to hundred thousand in symbols and in words?

   To read numbers up to hundred thousand:
   ✓ *Separate the digits into periods (thousands and units).*
   ✓ *From the left, read the number formed by the digits in the thousands period, followed by the name of the period (**thousand**).*
   ✓ *Do the same with the units period, without saying the name of the period.*

   To write numbers up to hundred thousand in symbols we use space to separate the digits into periods or groups of three starting from the right.
   ✓ *Thousands have two periods (thousands and units) – the units period should always be composed of three digits.*
   ✓ *Use zero as a place value holder of the missing digits in the units.*

   To write numbers in words, write them as they are read and use a comma to separate the thousands and units period.

What I Can Do

A. Use the digits 2, 3, 4, 5, and 6 only once for problems 1 to 2.

    1. Write the highest5-digit number.
    2. Write the least number possible with 3 in the thousands place.

B. In which amount does 3 have the greater value?

    3. ₱ 37 509 or ₱ 83 999
    4. ₱ 53 009 or ₱ 95 318

    5. There were *"forty-two thousand, three hundred twenty-one" ampalayas* harvested in Barangay San Pascual. Write the number in symbol.

    6. During the typhoon, 24 172 families were rescued. Write the number in words.

Are you done answering?
If yes, time to check. Please go to page 13 for the *Answer Key*.

Assessment

A. Complete the table by giving the place value and value of the underlined digit.

Number	Place Value	Value
7<u>2</u> 537	1.	2.
<u>9</u>4 281	3.	4.
69 <u>8</u>52	5.	6.

B. Read the following number words and write in symbols.

7. Thirteen thousand, four hundred seventy-nine   _____
8. Fifty-three thousand, one hundred sixty   _____

C. Read and write the following numbers in words.

9. 29 904 _____
10. 58 031 _____

Are you done answering?
If yes, time to check. Please go to page 13 for the *Answer Key*.

Additional Activities

A. Choose all the numbers inside the box that satisfy the given conditions.

1. 5 thousands

| 65 892,   98 547,   15 049,   58 923,   45 291 |

2. 7 ten thousands

| 83 710,   70 538,   72 932,   83 791,   71 382 |

B. Find the value of the underlined number. Write the letter of the correct answer.

3. 37 **6**98   a. 6 000   b. 600   c. 60 000
4. **8**3 912   a. 800   b. 8 000   c. 80 000
5. 7**4** 215   a. 4 000   b. 400   c. 40 000

C. Complete the table by writing the numbers in symbols or words.

	SYMBOLS	WORDS
6.	73 560	
7.		Eighteen thousand, four hundred six
8.	12 052	
9.		Fifty thousand, one hundred eleven
10.		Ninety - nine thousand, eight hundred seventy - six

Are you done answering?
If yes, time to check. Please go to page 13 for the *Answer Key*.

**CONGRATULATIONS!   You are learning very well.
See you in the next module.**

Answer Key

ADDITIONAL ACTIVITIES (page 11-12)

1. 65 892 : 15 049 : 45 291
2. 70 538 : 72 932 : 71 382
3. B
4. C
5. A
6. Seventy-three thousand, five hundred sixty
7. 18 406
8. Twelve thousand, fifty-two
9. 50 111
10. 99 876

ASSESSMENT (page 10-11)

1. Thousands
2. 2 000
3. Ten thousands
4. 90 000
5. Hundreds
6. 800
7. 13 479
8. 53 160
9. Twenty-nine thousand, nine hundred four
10. Fifty-eight thousand, thirty-one

WHAT I CAN DO (page 10)

1. 65 432
2. 23 456
3. ₱ 37 509
4. ₱ 53 009
5. 42 321
6. Twenty-four thousand, one hundred seventy-two

WHAT'S IN (pages 2 and 3)

A. 1. 567
2. 6 981
3. 1 782
4. 5 916
5. 6 999

B. 1. True
2. False
3. True
4. False
5. True

WHAT I KNOW (pages 1-2)

1. ☺
2. ☺
3. ☺
4. ☺
5. ☺
6. ☺
7. ☺
8. ☺
9. ☺
10. ☺

WHAT'S MORE (page 6-8)

Assessment 1

1. 7 000
2. 90 000, 3
3. 700 + 20 + 9
4. 62 438
5. 57 826
6. 9 408
7. 30 000
8. 80
9. 90 000
10. 6

Activity 1

A. 1. 3
2. 8
3. 5
4. 9
5. 4
6. 900   B.
7. 5
8. 3
9. 6, 4, 2
10. 4, 5, 8

Activity 2

A. 1. Twenty-nine thousand, six hundred ten
2. Twelve thousand, forty-five
3. Seventy-one thousand, three hundred twenty-seven
4. Eighty-three thousand, one hundred eighty-three
5. Eleven thousand, eight hundred seventy-six
B. 6. 51 242
7. 11 069
8. 38 750
9. 14 018
10. 90 900

Assessment 2

ANSWER	LETTER
1. Tens	F
2. Hundreds	R
3. Thousands	I
4. Ten Thousands	E
5. Ones	N
6. 73 854	D
7. 50 000	S
8. 8000	A
9. Hundreds	R
10. Ten Thousands	E
11. Tens	F
12. 95 374	O
13. Hundreds	R
14. Ten Thousands	E
15. Sixty-four Thousand, fifteen	V
16. Ten Thousands	E
17. Hundreds	R

Score update: (What's More- Assessment 1)

- ☐ 10   WOW! GREAT JOB!
- ☐ 8-9   VERY NICE!
- ☐ 6-7   NICE!
- ☐ 4-5   OOOPPPS! Let us review and go over with the test again.
- ☐ 0-3   Don't worry. Take time to go over the lesson again. Kindly approach your teacher or facilitator if you need help.
  Have fun!

Score update: (What's More- Assessment 2)

- ☐ 17   WOW! GREAT JOB!
- ☐ 13-16   VERY NICE!
- ☐ 9-12   NICE!
- ☐ 5-8   OOOPPPS! Let us review and go over with the test again.
- ☐ 0-4   Don't worry. Take time to go over the lesson again. Kindly approach your teacher or facilitator if you need help.
  Have fun!

Score update: (What I Can Do)

- ☐ 6   WOW! GREAT JOB!
- ☐ 5   VERY NICE!
- ☐ 3-4   NICE!
- ☐ 0-2   OOOPPPS! Don't worry. Take time to go over the lesson again. Kindly approach your teacher or facilitator if you need help.
  Have fun!

References

K to 12 Mathematics Curriculum Guide, August 2016.

Tabilang, A. et al. 2015. *Mathematics: Learner's Material*, Pasig City: Lexicon Press