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DepED
DEPARTMENT OF EDUCATION

Lesson Exemplar for Mathematics

Quarter 1
Lesson
7

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Lesson Exemplar for Mathematics Grade 4
Quarter 1: Lesson 7 (Week 7)
SY 2024-2025

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Development Team

Writer:
- Diana A. Sampilo

Validator:
- Lalaine Ann F. Manuel, Ph.D. (Central Luzon State University)

Reviewed and Revised:
- PNU – RITQ Development Team

Management Team

Philippine Normal University
Research Institute for Teacher Quality
SiMERR National Research Centre

Every care has been taken to ensure the accuracy of the information provided in this material. For inquiries or feedback, please write or call the Office of the Director of the Bureau of Learning Resources via telephone numbers (02) 8634-1072 and 8631-6922 or by email at blr.od@deped.gov.ph.

MATHEMATICS / QUARTER 1 / GRADE 4

I. CURRICULUM CONTENT, STANDARDS, AND LESSON COMPETENCIES	
A. Content Standards	The learners demonstrate knowledge and understanding of whole numbers up to 1 000 000.
B. Performance Standards	By the end of the quarter, the learners are able to read, write, and compare whole numbers up to 1 000 000. (NA)
C. Learning Competencies and Objectives	**Learning Competency** 1. The learners read and write numbers up to 1 000 000 in numerals and in words. 2. The learners determine the place value of a digit in a 6-digit number. 3. The learners determine the digit of a number, given its place value.
D. Content	1. Reading and Writing Numbers from 1 up to 500 000 in Numerals and in Words 2. Reading and Writing Numbers from 500 001 up to 1 000 000 in Numerals and in Words 3. Determining the Place Value of a Digit in a 6-digit Number 4. Determining the Value of a Digit 5. Determining the Digit of a Number
E. Integration	

II. LEARNING RESOURCES
Department of Education. “Matatag K to 10 Curriculum of the K to 12 Program." Mathematics Grades 1 to 10. Government of the Philippines, Department of Education. 2015. Mathematics Learner’s Material. Pasig City. worlddata.info

III. TEACHING AND LEARNING PROCEDURE		**NOTES TO TEACHERS**
A. Activating Prior Knowledge	**DAY 1** **1. Short Review** A. Write numbers for the following words 1. four thousand three hundred ninety-five 2. eight thousand, two hundred four 3. five hundred fifty-five	**DAY 1** Mind Check to activate the learners' prior knowledge of reading and writing numbers. Provide them with a worksheet to answer.

	4. fifteen thousand, one hundred seventy 5. one hundred ten thousand, five hundred thirty-one B. Write the following numbers in words 6. 5 777 7. 50 680 8. 100 001 **DAY 2** A. Write numbers for the following words. 1. 500 000 2. 100 000 3. 4 000 B. Write the following numbers in words. 4. twenty thousand 5. three hundred thousand five **DAY 3** Prepare digit cards and place value cards. You can create these on index cards or print them out. Each digit card should have a number (0-9) on it, and each place value card should have the name of a place value (e.g., ones, tens, hundreds, thousands) on it. If using a whiteboard, draw a vertical line to represent the place values (ones, tens, hundreds, etc.). Begin by explaining the concept of place value. Discuss how each digit in a number holds a specific value depending on its position. Show examples of how place value works. For instance, in the number 347, the digit 3 represents 3 hundreds, the digit 4 represents 4 tens, and the digit 7 represents 7 ones. Provide 2 boxes of Digit Cards and Place Value Cards separately for the class. Each learner will pick one Digit Card and one Place Value Card to post on the board. Then, let them identify the value of the posted outcome. Learners will take turns until everyone participates. Ask questions about the placement and value. Then, ask the learners to read aloud in class.	**Answer Key:** A. 1. 4 395 2. 8 204 3. 555 4. 15 170 5. 110 531 B. 6. five thousand seven hundred seventy-seven 7. fifty thousand six hundred eighty 8. one hundred thousand one **DAY 2** Review the concepts covered in the previous lesson regarding reading numbers and place value. Use a quick warm-up activity by giving a worksheet form. **Answer Key:** 1. five hundred thousand 2. one hundred thousand 3. four thousand 4. 20 000 5. 305 005 **DAY 3** Facilitate the following activity to assess prior knowledge of place value by building numbers using digits and placeholders.

<table>
<tr>
<td></td>
<td>
DAY 4
Ask the learners to fill up the table below. Given the number 966,273, write the digit and the value of the digit of the following place value.
<table>
<tr><th></th><th>Place Value</th><th>Digit</th><th>Value</th></tr>
<tr><td>1</td><td>example: hundred thousands</td><td>9</td><td>900,000</td></tr>
<tr><td>2</td><td>thousands</td><td></td><td></td></tr>
<tr><td>3</td><td>ones</td><td></td><td></td></tr>
<tr><td>4</td><td>hundreds</td><td></td><td></td></tr>
<tr><td>5</td><td>tens</td><td></td><td></td></tr>
<tr><td>6</td><td>ten thousands</td><td></td><td></td></tr>
</table>
2. Feedback (Optional)
</td>
<td>
DAY 4
2. 6; 6,000
3. 3; 3
4. 2; 200
5. 7; 70
6. 6; 60,000
</td>
</tr>
<tr>
<td>B. Establishing Lesson Purpose</td>
<td>
DAY 1
1. Lesson Purpose
Discuss the purpose of this lesson which will focus on reading and writing numbers up to 500,000 in both numerals and words.

DAY 2
Explain that today's lesson focuses on reading and writing numbers from 500,001 to 1,000,000.

DAY 3
Explain that today's lesson is about understanding the concept of place value in 6-digit numbers and its value. Emphasize the importance of this skill for performing arithmetic operations and reading large numbers accurately.

DAY 4
Explain to learners that today's lesson will focus on understanding the value of a digit in a number. Emphasize the importance of this skill in reading and working with numbers effectively.

DAY 5
Explain to learners that they are going to show evidence that they’ve acquired knowledge on how to determine the digit of a number by understanding its place value in a given position. This skill will help them read and write numbers more accurately.
</td>
<td></td>
</tr>
</table>

	DAY 1 **2. Unlocking Content Vocabulary** Conduct spelling activity on numbers 0 to 9 and place value such as ones, tens, hundreds, and thousands. **DAY 2** Have a spelling activity on place value. **DAY 3** Present jumbled letters to the class. Pupils will arrange the letters to form words related to our topic. 1. CEPAL ELUVA 2. SONE 3. NETS 4. DUHNERD 5. SHOUTSAND 6. GITID **DAY 4** Review relevant mathematical vocabulary such as "place value," "digit," and "value."	**DAY 3** **Unlocking Vocabulary Answer:** 1. Place Value 2. Ones 3. Tens 4. Hundred 5. Thousands 6. Digit After the activity, give meaning to the keywords (using flip cards) such as "place value," "digit," "thousands," "hundreds," "tens," and "ones." Have students repeat these terms and provide simple explanations for each.
C. Developing and Deepening Understanding	**DAY 1** **SUB-TOPIC 1: Reading and Writing Numbers from 1 up to 500 000 in Numerals and in Words** **1. Explicitation** Let the learners read the following problem emphasizing the numeral. As an archipelago, the Philippines has a total land area of about 115,831 square miles. **2. Worked Example** Discuss the steps in reading and writing numbers: Step 1: Write the number words in symbol starting from the left most period to the right. Step 2: Use zeros to fill in any open spots to complete each period (if applicable) Step 3: Read each group of three digits individually, following the rules for reading numbers. For the groups of three digits, you'll read the hundreds, tens, and one's place. Step 4: After reading each group of three digits, use the appropriate place value word: "thousand," "million," etc., to indicate the magnitude of the group.	**DAY 1** **Worked Example Answer Key:** 1. 206 930 2. 400 246 3. 325 659 4. 500 000 5. 305 271 B. 1. three hundred forty-five thousand nine hundred 2. two hundred ninety thousand 3. four hundred ninety-nine thousand two hundred three

	Step 5: Continue reading the rest of the groups using the same pattern until you've read the entire number. Step 6: Write the figures in the Place value chart in words. A. Write numbers for the following words. 1. two hundred six thousand nine hundred thirty 2. four hundred thousand two hundred forty-six 3. three hundred twenty-five thousand six hundred fifty-nine 4. five hundred thousand 5. three hundred five thousand two hundred seventy-one B. Write the following numbers in words. 1. 345 900 2. 290 000 3. 499 203 **3. Lesson Activity** See Worksheet Activity 1 **DAY 2** **SUB-TOPIC 2: Reading and Writing Numbers from 500 001 up to 1 000 000 in Numerals and in Words** **1. Explicitation** Use meta cards to present numbers from 500 001 to 1 000 000. Play passing the basket, and whoever holds the basket when the music stops will draw one meta card containing numbers and try to read it. **2. Worked Example** To develop an understanding of reading and writing numbers from 500,001 to 1,000,000 in both numeral and word forms and also practice converting between numeral and word forms of large numbers, facilitate the following activity. • Divide the class into pairs or small groups for collaborative learning. • Each group should have a paper, a pen, and a set of number cards. • Explain that the activity involves both reading and writing large numbers and converting between numeral and word forms. • Set the timer and ask each group to select a number card or numeral in word form with a time limit and vice versa.	**Lesson Activity Answer Key:** A. 1. 916 436 2. 100 775 3. 755 609 4. 500 003 5. 205 268 B. 1. seven hundred eleven thousand sixty-eight 2. eight hundred twenty-three thousand nine hundred ninety-five 3. one hundred forty-one thousand nine hundred thirty-six **DAY 2** **Lesson Activity Answer Key:** A. 1. six hundred thirty-eight thousand nine hundred eighty-two 2. nine hundred ninety thousand two hundred ninety 3. four hundred thousand sixty-eight 4. nine hundred thirty-seven thousand two hundred eighty-three B. 1. 287 035 2. 837 827

	• Review the completed exercises together, addressing any questions or difficulties that arise. **3. Lesson Activity** See Worksheet Activity No. 2 **DAY 3** **SUB-TOPIC 3: Determining the Place Value of a Digit in a 6-digit Number** **1. Explicitation** Let the learners read the following problem emphasizing the numeral. The Philippines recorded a total of 164,000 tourists in 2021, ranking 144th in the world in absolute terms. Display the given numerals in the problem and let them read, determine the position of each digit, and read. Write the numbers in expanded form: 1. 164 000* = 1 hundred thousands + 6 ten thousands + 4 thousands + 0 hundreds + 0 tens + 0 ones or 100 000 + 60 000 + 4 000 + 000 + 00 + 0 = 100,000 + 60,000 + 4,000 2. 2 021 = 2 thousands + 0 hundreds + 2 tens + 1 ones** or 2 000 + 000 + 20 + 1 = 2,000 + 20 + 1 3. 144 = 1 hundreds** + 4 tens + 4 ones **2. Worked Example** To deepen learners' understanding of the concept, create a large place value chart with six columns labeled: Ones, Tens, Hundreds, Thousands, Ten Thousands, Hundred Thousands. Make sure the columns are clearly defined and spaced out. Gather the learners around the place value chart. Explain the concept of place value, where the position of a digit in a number determines its value. Present a 6-digit number (Ex: 425673). Each digit is written in each meta card. Distribute the 6 meta cards to each learner or group of learners. Instruct the learners to place the meta cards on the corresponding place value columns on the chart. **3. Lesson Activity** See Worksheet Activity No. 3	**DAY 3** The teacher may introduce the comma to separate critical place values, i.e., writing 164 000 as 164,000, which is the normal way of presenting such numbers. Explain that saying 1 ones or 1 hundreds would be incorrect in an English class but the "ones" and "hundreds" here are used as (nouns) place values - emphasize this fact. **Lesson Activity Answer Key:** A. 1. 60 + 8 2. 100 + 20 3. 5,000+300+80+9 4. 70,000+1,000+500+6 5.300,000+40,000+5,000+600+70+8 B. 1. 8,745 2. 51,830 3. 999,999 4. 345 5. 6,789

DAY 4

SUB-TOPIC 4: Determining the Value of a Digit and the Digit of a Number

1. Explicitation

Discuss in detail the answers to the questions in the short review.

2. Worked Example

Using this statement, The Philippines recorded a total of 164,000 tourists in 2021, ranking 144th in the world in absolute terms, complete the table below:

		Place Value	Digit	Value
1	164,000	hundred thousands		
2	2021	thousands		
3	144	ones		
4	2021	hundreds		
5	144	tens		
6	164,000	ten thousands		

3. Lesson Activity

See Worksheet Activity No. 4

DAY 5

See Worksheet Activity No. 5

C.

	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Ex: 274 620			√			
1. 102 837	√					
2. 902 389					√	
3. 271 837		√				
4. 456 724			√			
5. 874 324					√	
6. 726 391		√				
7. 826 302	√					
8. 283 628						√
9. 287 264				√		
10. 768 922		√				

DAY 4
Lesson Activity Answer Key:

		Digit	Expanded Form	in Word Form	Place Value	Value
1	210,873	1	200,000+10,000+800+70+3	two hundred ten thousand eight hundred seventy-three	ten thousands	10,000
2	902, 936	2	900,000+2,000+900+30+6	nine hundred two thousand nine hundred thirty-six	thousands	2,000
3	711, 068	6	700,000+10,000+1,000+60+8	seven hundred eleven thousand sixty-eight	tens	60
4	328,895	3	300,000+20,000+8,000+800+90+5	three hundred twenty-eight thousand eight hundred ninety-five	hundred thousands	300,000
5	100,436	4	100,000+400+30+6	one hundred thousand four hundred thirty-six	hundreds	400
6	230,435	5	200,000+30,000+400+30+5	two hundred thirty thousand four hundred thirty-five	ones	5
7	500,005	0	500,000+5	five hundred thousand five	tens	0
8	292,405	9	200,000+90,000+2,000+400+5	two hundred ninety-two thousand four hundred five	ten thousands	90,000
9	777,000	7	700,000+70,000+7,000	seven hundred seventy-seven thousand	hundred thousands	700,000
10	456,798	8	400,000+50,000+6,000+700+90+8	four hundred fifty-six thousand seven hundred ninety-eight	ones	8

DAY 5
Lesson Activity Answer Key:

		Digit	Expanded Form	in Word Form	Place Value	Value
1	873,210	1	800,000+70,000+3,000+200+10	eight hundred seventy-three thousand two hundred ten	tens	10,000
2	936,902	2	900,000+30,000+6,000+900+2	nine hundred thirty-six thousand nine hundred two	ones	2,000
3	68,711	6	60,000+8,000+700+10+1	sixty-eight thousand seven hundred eleven	ten thousands	60,000
4	895,328	3	800,000+90,000+5,000+300+20+8	eight hundred ninety-five thousand three hundred twenty-eight	hundreds	300
5	541,636	5	500,000+40,000+1,000+600+30+6	five hundred forty-one thousand six hundred thirty-six	hundred thousands	500,000
6	234,035	4	200,000+30,000+4,000+30+5	two hundred thirty-four thousand thirty-five	thousands	4,000
7	808,808	0	800,000+8,000+800+8	eight hundred eight thousand eight hundred eight	ten thousands	0
8	405,292	9	400,000+5,000+200+90+2	four hundred five thousand two hundred ninety-two	tens	90
9	680,711	7	600,000+80,000+700+10+1	six hundred eighty thousand seven hundred eleven	hundreds	700
10	128,405	8	100,000+20,000+8,000+400+5	one hundred twenty-eight thousand four hundred five	thousands	8,000

D. Making Generalizations

DAY 1-5

1. Learners' Takeaways

- Encourage learners to generalize on what they have learned about reading and writing numbers.
- Have the learners share their strategies for converting between numeral and word forms and discuss any shortcuts or tips they've discovered.
- Ask learners to summarize the key concept in their own words. For instance, they could say, "The value of a digit depends on its place in the number."

- Have learners summarize the key concept in their own words and share how understanding place value helps them read and write numbers.

2. Reflection on Learning

- How can you apply the skills and concepts you've learned about reading and writing numbers in your everyday life?
- Engage learners in a discussion about the importance of understanding place value, especially in larger numbers.
- Have them reflect on how this knowledge can help them solve problems and perform calculations accurately.

IV. EVALUATING LEARNING: FORMATIVE ASSESSMENT AND TEACHER'S REFLECTION

NOTES TO TEACHERS

A. Evaluating Learning

DAY 5

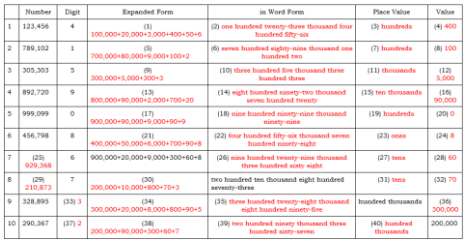
1. Formative Assessment

Complete the table below.

	Number	Digit	Expanded Form	In Word Form	Place Value	Value
1	123,456	4	(1)	(2)	(3)	(4)
2	789,102	1	(5)	(6)	(7)	(8)
3	305,303	5	(9)	(10)	(11)	(12)
4	892,720	9	(13)	(14)	(15)	(16)
5	999,099	0	(17)	(18)	(19)	(20)
6	456,798	8	(21)	(22)	(23)	(24)
7	(25)	6	900,000+20,00+ 9,000+300+60+8	(26)	(27)	(28)
8	(29)	7	(30)	two hundred ten thousand eight hundred seventy-three	(31)	(32)
9	328,895	(33)	(34)	(35)	hundred thousands	(36)
10	290,367	(37	(38)	(39)	(40)	200,000

2. Homework (Optional)

Answers:



	Number	Digit	Expanded Form	in Word Form	Place Value	Value
1	123,456	4	(1) 100,000+20,000+3,000+400+50+6	(2) one hundred twenty-three thousand four hundred fifty-six	(3) hundreds	(4) 400
2	789,102	1	(5) 700,000+80,000+9,000+100+2	(6) seven hundred eighty-nine thousand one hundred two	(7) hundreds	(8) 100
3	305,303	5	(9) 300,000+3,000+300+3	(10) three hundred five thousand three hundred three	(11) thousands	(12) 5,000
4	892,720	9	(13) 800,000+90,000+2,000+700+20	(14) eight hundred ninety-two thousand seven hundred twenty	(15) ten thousands	(16) 90,000
5	999,099	0	(17) 900,000+90,000+9,000+90+9	(18) nine hundred ninety-nine thousand ninety-nine	(19) hundreds	(20) 0
6	456,798	8	(21) 400,000+50,000+6,000+700+90+8	(22) four hundred fifty-six thousand seven hundred ninety-eight	(23) ones	(24) 8
7	(25) 929,368	6	900,000+20,000+9,000+300+60+8	(26) nine hundred twenty-nine thousand three hundred sixty eight	(27) tens	(28) 60
8	(29) 210,873	7	(30) 200,000+10,000+800+70+3	two hundred ten thousand eight hundred seventy-three	(31) tens	(32) 70
9	328,895	(33) 3	(34) 300,000+20,000+8,000+800+90+5	(35) three hundred twenty-eight thousand eight hundred ninety-five	hundred thousands	(36) 300,000
10	290,367	(37) 2	(38) 200,000+90,000+300+60+7	(39) two hundred ninety thousand three hundred sixty-seven	(40) hundred thousands	200,000

<table>
<tr><td rowspan="5">B. Teacher's Remarks</td><td>Note observations on any of the following areas:</td><td>Effective Practices</td><td>Problems Encountered</td><td rowspan="5">The teacher may take note of some observations related to the effective practices and problems encountered after utilizing the different strategies, materials used, learner engagement, and other related stuff.

Teachers may also suggest ways to improve the different activities explored/lesson exemplar.</td></tr>
<tr><td>strategies explored</td><td></td><td></td></tr>
<tr><td>materials used</td><td></td><td></td></tr>
<tr><td>learner engagement/ interaction</td><td></td><td></td></tr>
<tr><td>others</td><td></td><td></td></tr>
<tr><td>C. Teacher's Reflection</td><td colspan="2">Reflection guide or prompt can be on:
• <u>principles behind the teaching</u>
What principles and beliefs informed my lesson?
Why did I teach the lesson the way I did?

• <u>students</u>
What roles did my students play in my lesson?
What did my students learn? How did they learn?

• <u>ways forward</u>
What could I have done differently?
What can I explore in the next lesson?</td><td colspan="2">Teacher's reflection in every lesson conducted/facilitated is essential and necessary to improve practice. You may also consider this as an input for the LAC/Collab sessions.</td></tr>
</table>