## Mathematics <br> Quarter 1 - Module 4: Rounding Numbers to the Nearest Thousands and Ten Thousands



## Mathematics - Grade 4

## Alternative Delivery Mode

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## 4

## Mathematics Quarter 1 - Module 4: Rounding Numbers to the Nearest Thousands andTen Thousands

## Introductory Message

For the facilitator:
Welcome to Mathematics Grade 4 Alternative Delivery Mode (ADM) Module on Rounding Numbers to the Nearest Thousands and Ten Thousands!

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:


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 Rounding Numbers to the Nearest Thousands and Ten Thousands!

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:
(c) What I Need to Know

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

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

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

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.

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

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

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

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

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 have learned from the previous module how to compare and order numbers up to hundred thousand. This module is about rounding numbers. Rounding numbers is helpful in estimating distance for travel, time needed in doing tasks, things in large amounts, and also in budgeting money. I know you will enjoy this module.

After going through this module, you are expected to round numbers to the nearest thousands and ten thousands.


Round Jayson's numbers to the nearest thousands and copy the correct number from the arrow.
1.

2.

3.


This time, round his numbers to the nearest ten thousands and then copy the correct number from the arrow.
4.

5.

6.

7.


Solve the following problems.
8. In the three barangays of Sorsogon City, 21897 families received relief goods. About how many thousands of families received the relief goods?
9. Ruden always saves money in a bank. For two years, he already saved $\mp 28,760.00$. To the nearest ten thousands, about how much money has he already saved in the bank?
10. Food Jobs Eatery delivered 35632 food packs to their customers. About how many thousands of food packs were delivered to their customers?

Are you done answering?
If yes, time to check. Please go to page 12 for the Answer Key.

What's In

Do you remember how to round numbers to the nearest tens and hundreds?

Below are some examples.
Rounding numbers to the nearest tens


Rounding numbers to the nearest hundreds


Help Jayson round each number on the balloons.


Are you done answering?
If yes, time to check. Please go to page 12 for the Answer Key.

## What's New

Do you help your parents? In what way do you help them?

## Read the problem.

During weekends, Jayson helps his family in their Balloons and Party Needs Store. He counts and checks the inflated balloons based on the order of the customer before the delivery. At the end of the week, the store delivered 15 678 balloons. About how many thousand balloons were delivered?


Answer the given problem.

What is It

Let us see if we have the same answer. You can answer the question by rounding 15678 to the nearest thousands.

What do we mean by rounding?
Rounding is the process of finding the nearest value to a certain number.

## Let us study the number line below.



To which number is 15678 closer, 15000 or 16000 ?
Since 15678 is closer to 16000 , we can say that 15678 becomes 16 000 when rounded to the nearest thousands. Hence, about 16000 balloons were delivered at the end of the week.

## We can also round off numbers using the following steps:

1. Identify the digit in the rounding place.

This is called the rounding digit.
$1 \underline{5} 678$
2. Identify the digit to the right of the rounding place.

15678
2.1 If the digit to the right of the rounding place is less than $5(0$, $1,2,3$ or 4 ), round the number down by leaving the rounding digit the same. Then, change all digits to the right of the rounding digit to zero.
2.2 If the digit to the right of the rounding place is 5 or greater than 5 ( $6,7,8$ or 9 ), round the number up by adding one to the rounding digit. Then, change all digits to the right of the rounding digit to zero.

digit at the right of the rounding place rounding place

Let us go over again,
$\checkmark$ The underlined digit 5 is the digit at the rounding place.
$\checkmark 6$ is the digit at the right of the rounding place.
$\checkmark$ Since 6 belongs to $5-9$ group of numbers (5 or greater than 5), add one to the digit at the rounding place (add 1 to 5 ).
$\checkmark$ Then change all the digit at the right of the rounding place value to zero.
6000
15678 16000
$\checkmark$ Therefore, 16678 when rounded to the nearest thousands is $\mathbf{1 6 0 0 0}$

## Answer: About 16000 balloons were delivered at the end of the week.

Let's study these examples.

| Number | Rounded to the nearest |  |
| :---: | :---: | :---: |
|  | Thousands | Ten Thousands |
| 93856 | 94000 | 90000 |
| 36410 | 36000 | 40000 |
| 20917 | 21000 | 20000 |
| 42739 | 43000 | 40000 |
| 81357 | 81000 | 80000 |

Now, you already learned how to round numbers to the nearest thousands and ten thousands. This time you are now ready for the activities. LET'S GO!

## A

B C

## What's More

## Activity 1

Round each number to the nearest place value indicated.

| Number | Rounded to the nearest |  |
| :---: | :---: | :---: |
|  | Thousands | Ten Thousands |
| 1-2. 38850 |  |  |
| $3-4.42098$ |  |  |
| $5-6.59319$ |  |  |
| $9-8 \quad 87274$ |  |  |

9. The Department of Education released a list of 3250 approved supplementary learning resources in 2019 (DO No. 35, s. 2019). About how many thousands of supplementary learning resources do schools can choose to buy?
10. The Langwika sewers were able to produce 28614 cloth face masks for frontliners in Laguna. What is 28614 if rounded off to the nearest ten thousands?

Are you done answering?
If yes, time to check. Please go to page 12 for the Answer Key.

## Assessment 1

Answer the following using the rules of rounding numbers.

1. If the school has 4768 learners last school year, about how many enrollees do we expect from the learners last school year?
2. The COVID-19 cases in the country reached 9223 on May 3, 2020 according to Department of Health (https://www.doh.gov.ph/covid19tracker). How do you give the approximate number of COVID-19 cases in the nearest thousands?
3. How do you estimate the amount in nearest ten thousands of the F125 870 donations that a certain barangay received?
4. If P61 753 worth of canned goods were donated in a certain city, how do you estimate the amount in the nearest ten thousands?
5. If 198204 households in a province that followed the Enhanced Community Quarantine guidelines will be given recognition for their cooperation, around how many hundred thousand households are going to be recognized for their cooperation?

Are you done answering?
If yes, time to check. Please go to page 12 for the Answer Key.

## Activity 2

Round each number to the place value of the underlined digit.

1. $3 \underline{5} 982$ $\qquad$
2. 82562 $\qquad$
3. $8 \underline{7} 567$ $\qquad$
4. $\underline{3} 4673$ $\qquad$
5. $6 \underline{7} 436$ $\qquad$

Are you done answering?
If yes, time to check. Please go to page 12 for the Answer Key.

## Assessment 2

A. Choose the arrow of the correct answer when each number is rounded to its underlined digit.

| 1. 24782 | - 24000 | - 25000 |
| :--- | :--- | :--- |
| 2. $\underline{5} 1920$ | - 50000 | - 60000 |
| 3. $4 \underline{7} 519$ | - 47000 | 个 48000 |
| 4. $8 \underline{2} 812$ | - 82000 | - 83000 |
| 5. $\underline{79} 145$ | - 70000 | 个 80000 |

Are you done answering?
If yes, time to check. Please go to page 12 for the Answer Key.

## What I Have Learned

How do you round numbers to the nearest thousands and ten thousands?

To round numbers to the nearest thousands and ten thousands:

1. Identify the rounding place and the digit to the right of the rounding place.
2. If the digit at the right of the rounding place is from $0-4$, round down the digit at the rounding place or it will remain the same.
3. If the digit at the right of the rounding place is from $5-9$, round up the digit at the rounding place or add 1 to the digit of the rounding place.

## What I Can Do

Read the situation and complete the table below.
The Schools District of San Marcelino made a list of their district enrolment from school year 2016-2017 to school year 2020-2021.

| $2016-2017: 19427$ | $2017-2018: 26930$ |
| :--- | :--- |
| $2018-2019: 28327$ | $2019-2020: 33528$ |
| $2020-2021: 32879$ |  |

Copy and round off to the nearest thousands and ten thousands the school population for each school year.

| School Year | School <br> Population | Thousands | Ten <br> Thousands |
| :---: | :---: | :---: | :---: |
| $2016-2017$ |  |  |  |
| $2017-2018$ |  |  |  |
| $2018-2019$ |  |  |  |
| $2019-2020$ |  |  |  |
| $2020-2021$ |  |  |  |

Are you done answering?
If yes, time to check. Please go to page 12 for the Answer Key.

## Assessment

A. Round each number to the nearest thousands.

1. 37823
2. 98528
3. 43106
$\qquad$
$\qquad$
$\qquad$
4. Sorsogon City received 24142 kilos of rice donations from private individuals. About how many thousand kilos of rice were donated to the city?
5. For one year, the district of Bacon in Sorsogon City planted 78639 mahogany seedlings. Estimate, in thousands, the mahogany seedlings planted.
B. Round each number to the nearest ten thousands.
6. 67345
7. 32649
8. 94205
$\qquad$
$\qquad$
$\qquad$
9. The Mabini National High School has a total of 16592 volunteers for Brigada Eskwela. Round 16592 to the nearest ten thousands.
10. There are 72671 boxes of sardines to be distributed in a certain province. What is 72671 if rounded off to the nearest ten thousands?

Are you done answering?
If yes, time to check. Please go to page 12 for the Answer Key.

## Additional Activities

A. Choose two numbered cakes that can be rounded to the given numbers.

B. Answer the following questions.
6. What is the biggest number that rounds to 80000 when rounded off to the nearest ten thousands?
7. What is the smallest number that rounds to 45000 when rounded off to the nearest thousands?

8 -9. List two possible numbers that can be rounded off to 31000 .
10. How many numbers can be rounded off to 20000 ?

Are you done answering?
If yes, time to check. Please go to page 12 for the Answer Key.

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

## Answer Key



| $01 / 2$ |  | 008 |
| :---: | :---: | :---: |
| 016Z |  | 008 |
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| $000 \varepsilon \varepsilon^{\circ} \mathrm{L}$ | 00008 | Z |
| 000 て\＆ 9 | 00008 | $\downarrow$ |
| （2 pue $\downarrow$ sab | MONP | $1 \forall$ |

## References

K to 12 Mathematics Curriculum Guide, August 2016.
Tabilang, A. et. al. (2015). Mathematics: Learner's Material, Pasig City: Lexicon Press.

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