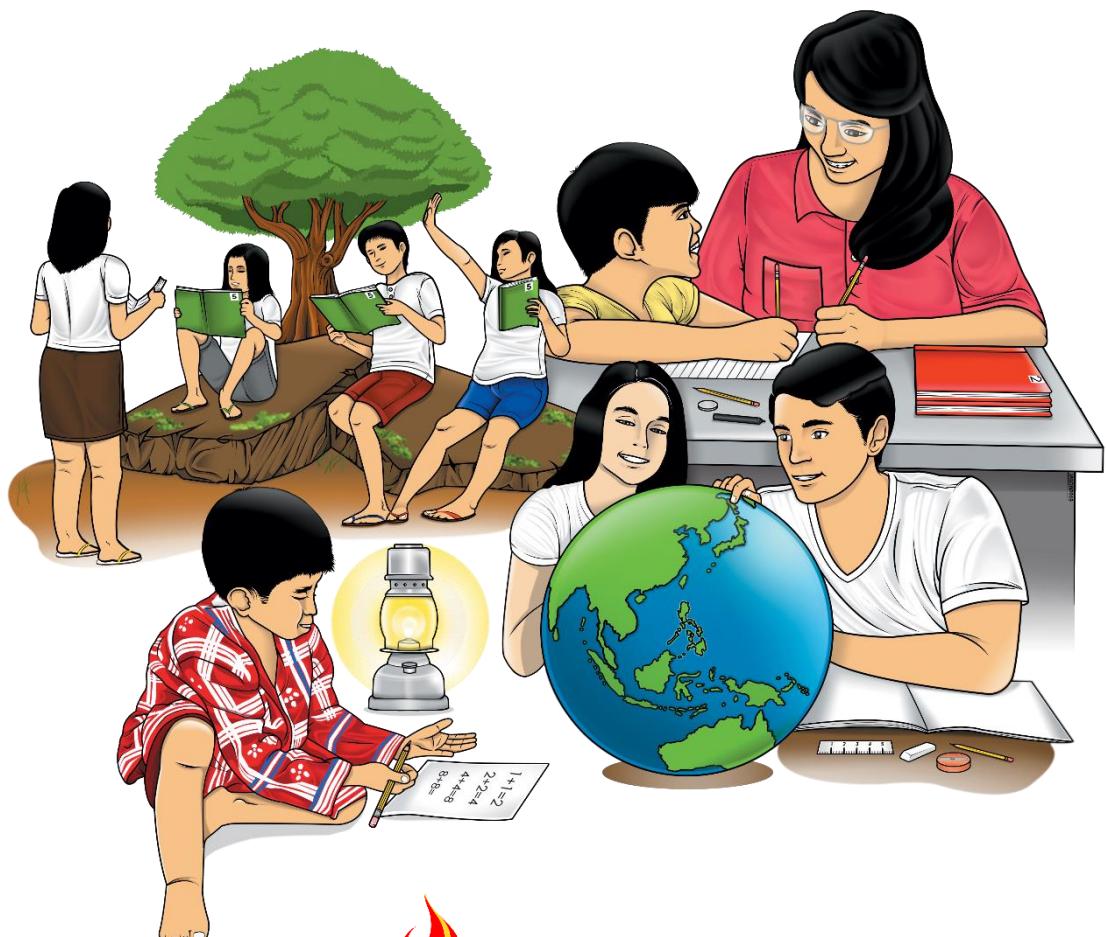


Mathematics

Quarter 1 – Module 4:

Rounding Numbers to the Nearest Thousands and Ten Thousands



GOVERNMENT PROPERTY
NOT FOR SALE



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.



What I Know

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

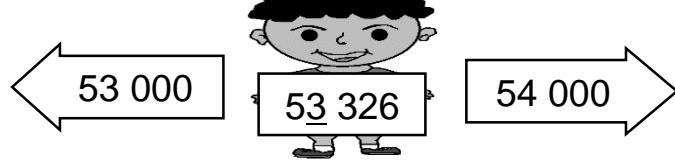
1.



2.

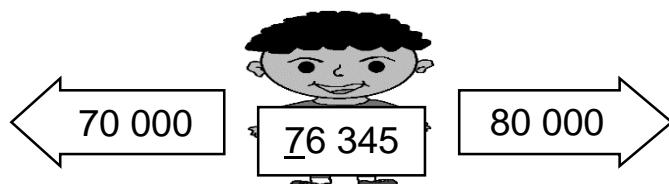


3.

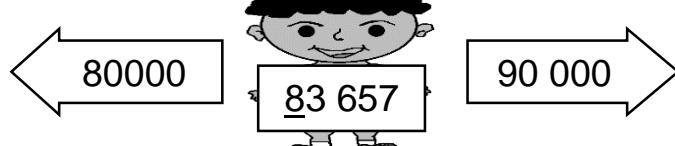


This time, round his numbers to the nearest *ten thousands* and then copy the correct number from the arrow.

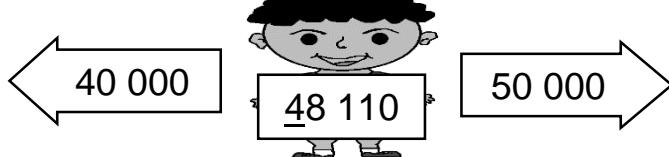
4.



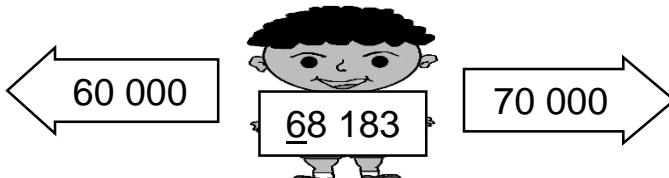
5.



6.



7.

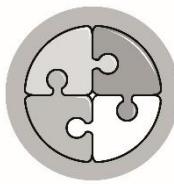


Solve the following problems.

8. In the three barangays of Sorsogon City, 21 897 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 ₱28,760.00. To the nearest ten thousands, about how much money has he already saved in the bank?
10. Food Jobs Eatery delivered 35 632 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**.

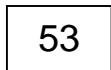


What's In

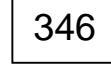
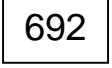
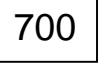
Do you remember how to round numbers to the nearest tens and hundreds?

Below are some examples.

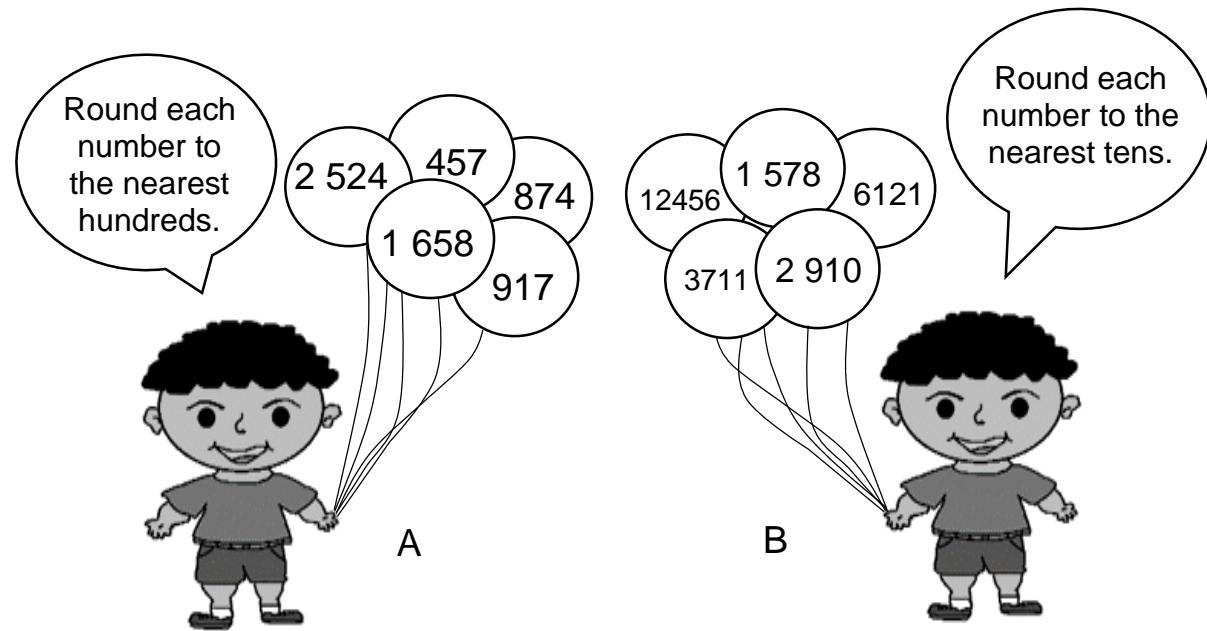
Rounding numbers to the nearest tens

Examples:  →   → 

Rounding numbers to the nearest hundreds

Examples:  →   → 

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**.

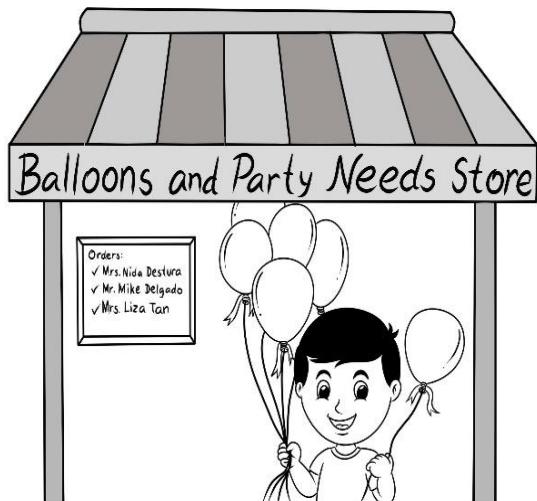


What's New

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.



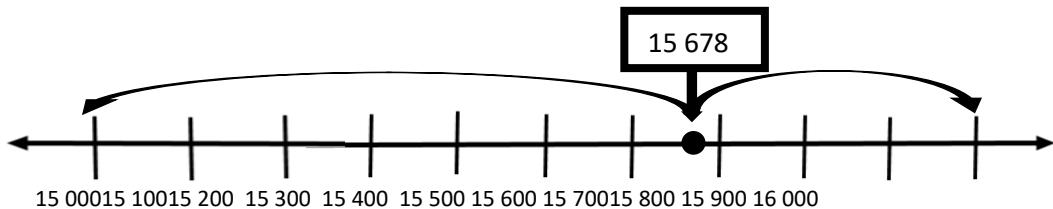
What is It

Let us see if we have the same answer. You can answer the question by rounding 15 678 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 15 678 closer, 15 000 or 16 000?

Since 15 678 is closer to 16 000, we can say that 15 678 becomes 16 000 when rounded to the nearest thousands. Hence, about 16 000 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.

15678

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.

15678



digit at the right of the rounding place
rounding place

Let us go over again,

- ✓ The underlined digit 5 is the digit at the rounding place.
- ✓ 6 is the digit at the right of the rounding place.
- ✓ 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).

- ✓ Then change all the digit at the right of the rounding place value to zero.

$$\begin{array}{r} 6\ 000 \\ 15\ 678 \longrightarrow 16\ 000 \end{array}$$

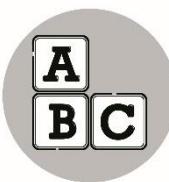
- ✓ Therefore, 16 678 when rounded to the nearest thousands is **16 000**

Answer: *About 16 000 balloons were delivered at the end of the week.*

Let's study these examples.

Number	Rounded to the nearest	
	Thousands	Ten Thousands
93 856	94 000	90 000
36 410	36 000	40 000
20 917	21 000	20 000
42 739	43 000	40 000
81 357	81 000	80 000

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!



What's More

Activity 1

Round each number to the nearest place value indicated.

Number	Rounded to the nearest	
	Thousands	Ten Thousands
1-2. 38 850		
3-4. 42 098		
5-6. 59 319		
9-8. 87 274		

9. The Department of Education released a list of 3 250 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 28 614 cloth face masks for frontliners in Laguna. What is 28 614 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 4 768 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 9 223 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 ₱125 870 donations that a certain barangay received?
4. If ₱61 753 worth of canned goods were donated in a certain city, how do you estimate the amount in the nearest ten thousands?
5. If 198 204 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. 35 982 _____

2. 82 562 _____

3. 87 567 _____

4. 34 673 _____

5. 67 436 _____

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. 24 782  24 000  25 000

2. 51 920  50 000  60 000

3. 47 519  47 000  48 000

4. 82 812  82 000  83 000

5. 79 145  70 000  80 000

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 : 19 427	2017 - 2018 : 26 930
2018 - 2019 : 28 327	2019 - 2020 : 33 528
2020 - 2021 : 32 879	

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

School Year	School Population	Thousands	Ten 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. 37 823 _____

2. 98 528 _____

3. 43 106 _____

4. Sorsogon City received 24 142 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 78 639 mahogany seedlings. Estimate, in thousands, the mahogany seedlings planted.

B. Round each number to the nearest ten thousands.

6. 67 345 _____

7. 32 649 _____

8. 94 205 _____

9. The Mabini National High School has a total of 16592 volunteers for *Brigada Eskwela*. Round 16 592 to the nearest ten thousands.
10. There are 72 671 boxes of sardines to be distributed in a certain province. What is 72 671 if rounded off to the nearest ten thousands?

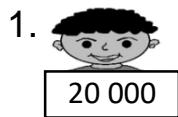
Are you done answering?

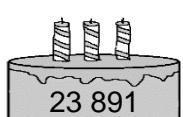
If yes, time to check. Please go to page 12 for the **Answer Key**.

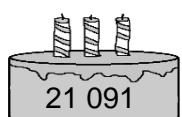


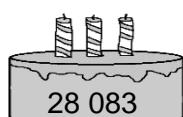
Additional Activities

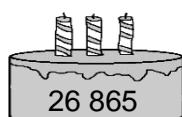
- A. Choose two numbered cakes that can be rounded to the given numbers.

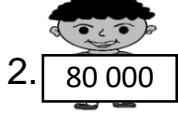
1.  20 000

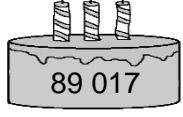
 23 891

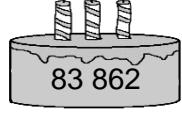
 21 091

 28 083

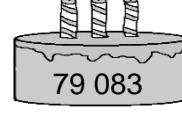
 26 865

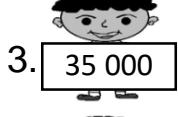
2.  80 000

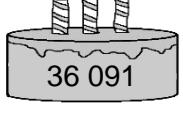
 89 017

 83 862

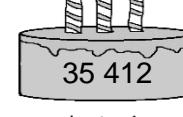
 74 987

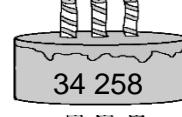
 79 083

3.  35 000

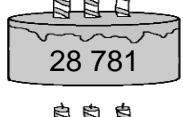
 36 091

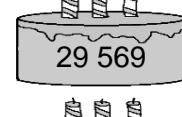
 34 678

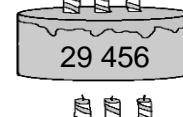
 35 412

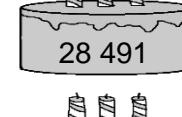
 34 258

4.  29 000

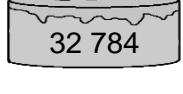
 28 781

 29 569

 29 456

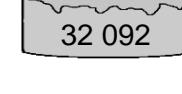
 28 491

5.  32 000

 32 784

 31 678

 32 800

 32 092

- B. Answer the following questions.

6. What is the biggest number that rounds to 80 000 when rounded off to the nearest ten thousands?

7. What is the smallest number that rounds to 45 000 when rounded off to the nearest thousands?

8-9. List two possible numbers that can be rounded off to 31 000.

10. How many numbers can be rounded off to 20 000?

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

A	1. 23 881	:	21 091
2.	83 862	:	79 083
3.	34 678	:	35 412
4.	28 781	:	29 466
5.	32 092	:	31 678
B.	6. 84 999	:	7. 44 500
8-9.	Any numbers from 30 500 to 31 499	:	10. 10 000

Activity 1		Activity 2	
Assessment 1		Assessment 2	
1. 5 000	10. 30 000	1. 36 000	5. 200 000
2. 9 000	2. 130 000	2. 80 000	3. 88 000
3. 130 000	3. ↓	3. ↓	4. ↓
4. 60 000	4. ↓	4. ↓	4. ↓
5. 200 000	5. ↓	5. ↓	5. ↓

WHAT'S IN (page 3)

WHAT I KNOW (Pages 1 and 2)	
1.	80 000 6.32 000
2.	80 000 7.53 000
3.	60 000 8.22 000
4.	70 000 9.30 000
5.	74 000 10.36 000

A. 1. 38 000 B. 6. 70 000
 2. 99 000 C. 7. 30 000
 3. 43 000 D. 8. 90 000
 4. 24 000 E. 9. 20 000
 5. 79 000 F. 10. 70 000