

Lesson Exemplar for Mathematics

Quarter 2
Lesson

6

Lesson Exemplar for Mathematics Grade 4
Quarter 2: Lesson 6 (Week 6)
SY 2024-2025

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MATHEMATICS / QUARTER 2 / GRADE 4**I. CURRICULUM CONTENT, STANDARDS, AND LESSON COMPETENCIES**

A. Content Standards	Conversion of units of length, mass, capacity, and time.
B. Performance Standards	Convert units of length, mass, capacity, and time. (MG)
C. Learning Competencies and Objectives	- Convert time measures from smaller to larger units, and vice versa: - seconds to minutes, - minutes to hours, - hours to days, - days to weeks - weeks to months, and - months to years. - Solve problems involving conversion of time - Find the elapsed time in hours and minutes - Solve word problems involving elapsed time in hours and minutes.
D. Content	- Conversion of time measures from smaller to larger units and vice versa - Word problems on conversion of time measures - Elapsed time in hours and minutes - Word problems involving elapsed time in hours and minutes
E. Integration	Punctuality and efficiency Importance of spending time with loved ones

II. LEARNING RESOURCES

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Jalon, H.F., Dumail, R.G., Pegarido, M.F., Cedeno, M. R. (2019). *Phoenix Math for the 21st Century Learners Grade 4 2nd Edition*. Phoenix Publishing House.

Khan Academy Converting units of time review (seconds, minutes, & hours). (n.d.). <https://www.khanacademy.org/math/cc-fourth-grade-math/imp-measurement-and-data-2/imp-converting-units-of-time/a/converting-units-of-time-review>

Units of Time and their Conversion (Definition, Types and Examples) - BYJUS. (2022, May 10). <https://byjus.com/us/math/units-of-time-and-their-conversion/>

Yn, G. U. (2017). *Our World of Math Grade 4*. Vibal Group, Inc., Quezon City

III. TEACHING AND LEARNING PROCEDURE	NOTES TO TEACHERS
A. Activating Prior Knowledge DAY 1 1. Short Review Using a physical analog clock, ask the pupils to identify the displayed time.    Provide distinct times and let the pupils represent them using an analog clock.    The teacher may ask the following questions: 1. How many hours are there in one whole day? 2. How many hours does it take for an analog clock to complete one cycle? 3. How many cycles should an analog clock undergo to complete one whole day? Important Concepts: The hour hands of a clock with a 12-hour cycle must complete two cycles for one whole day. The acronyms AM and PM are used to indicate these cycles. Sometimes, NN for noon and MN for midnight are also utilized to avoid confusion. Remember, 12:00 NN represents 12:00 PM while 12:00 MN represents 12:00 AM.	The teacher may include more examples aside from the provided illustrations. Option 1: (individual) This activity may be structured as a game, such as the fastest pupil who can accurately identify the time. Option 2: (group) Pupils may also be grouped into five. The teacher may assign one in each group to bring a physical analog clock. Each group will give their response. Option 3: Use of Virtual Manipulatives The teacher may either flash different illustrations from the internet or ask pupils to illustrate the given time. See the link below: https://toytheater.com/clock/ The teacher may add information about the 24-hour clock being

	2. Feedback (Optional) used by the military. The 24-hour cycle is usually represented using a digital clock. Example: 15:25 is the same as 3:25 PM																													
B. Establishing Lesson Purpose	1. Lesson Purpose Ask the pupils to accomplish the <i>Saturday Routine</i> table to identify how they usually spend their Saturdays. Use the table below. Volunteers from the class will be called to share their outputs. My Saturday Routine <table><tr><th>What is your usual Saturday routine after waking up in the morning? (specify the activities)</th><th>What time do you do this activity? (specific time)</th></tr><tr><td>Wash my face, gurgle, and organize my bed</td><td>7:00 AM</td></tr><tr><td>Take my breakfast</td><td>8:00 AM</td></tr><tr><td>Take a bath</td><td>8:30 AM</td></tr><tr><td>Play with my siblings</td><td>9:00 AM</td></tr><tr><td>Read my favorite book</td><td>10:00 AM</td></tr><tr><td>Take my lunch</td><td>12:00 NN</td></tr><tr><td>Watch my favorite cartoon show</td><td>1:00 PM</td></tr><tr><td>Help my mother organized our clothes</td><td>3:00 PM</td></tr><tr><td>Visit my grandparents</td><td>4:00 PM</td></tr><tr><td>Take a bath</td><td>6:00 PM</td></tr><tr><td>Take my dinner</td><td>6:30 PM</td></tr><tr><td>Read my favorite book</td><td>7:00 PM</td></tr><tr><td>Sleeping time</td><td>8:30 PM</td></tr></table> The teacher can process this activity by asking the following questions: 1. What activities in the routine table are your top 3 most favorite? Why? 2. What activity is your least priority? Why? 3. What part of your Saturday routine takes the longest time? Shortest time?	What is your usual Saturday routine after waking up in the morning? (specify the activities)	What time do you do this activity? (specific time)	Wash my face, gurgle, and organize my bed	7:00 AM	Take my breakfast	8:00 AM	Take a bath	8:30 AM	Play with my siblings	9:00 AM	Read my favorite book	10:00 AM	Take my lunch	12:00 NN	Watch my favorite cartoon show	1:00 PM	Help my mother organized our clothes	3:00 PM	Visit my grandparents	4:00 PM	Take a bath	6:00 PM	Take my dinner	6:30 PM	Read my favorite book	7:00 PM	Sleeping time	8:30 PM	Option 1: In case of a time constraint, this activity can be limited to the pupil’s routine from breakfast to lunch only. Option 2: Should the teacher prefer a more comprehensive timetable, this activity may be given to the pupils as an assignment prior to the lesson. The teacher may ask some volunteers to present their work in the class. Option 3: The teacher may present one example from the class and process the activity using the sample questions.
What is your usual Saturday routine after waking up in the morning? (specify the activities)	What time do you do this activity? (specific time)																													
Wash my face, gurgle, and organize my bed	7:00 AM																													
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Understanding the concept of time is essential for young children. From the moment we wake up to when we sleep at night, we tend to be conscious of the time. We usually estimate how long we can finish an activity, what time we need to leave the house to avoid getting late, and so on. While still young, learning how to manage your time well and spending it wisely is important. As the saying goes, "Time is gold". It would be best if you have a balanced time to play, watch TV, study, and help in household chores. Proper time management allows you to spend unforgettable moments with your family and friends.

2. Unlocking Content Area Vocabulary

The teacher will ask the pupils to read the sentences below and identify the missing words to make them correct.

There are ____ seconds in 1 minute.

There are ____ minutes in 1 hour.

There are ____ hours in 1 day.

There are ____ days in 1 week.

There are ____ weeks in 1 month.

There are ____ months in 1 year.

Second, minute, day, week, and month are the terms used to express the durations or lengths of time in doing something.

Instead of saying, "I was able to answer the activity for 2 minutes only," you can also say, "I was able to answer the activity for 120 seconds only". Both are telling us the same length of time in doing the activity. Hence, 2 minutes is equal to 120 seconds.

Instead of saying, "I spent 1 hour studying my lesson in Math", you can also say, "I spent 60 minutes studying my lesson in Math". Both are telling us the same length of time spent in studying the lesson. Hence, 1 hour is equal to 60 minutes.

Values Integration

Emphasize the importance of time management and spending time wisely.

These sentences can be written on a PowerPoint presentation or on a rolled cartolina, which may be posted on the board.

The following may be presented.

1 minute = 60 seconds
1 hour = 60 minutes
1 day = 24 hours
1 week = 7 days
1 month = 4 weeks
1 year = 12 months

After each statement, the teacher will write these on the board:

2 minutes = 120 seconds
1 hours = 60 minutes
3 weeks = 21 days

Pictures can be shown with the statements contained inside a speech bubble.

	Instead of saying, “I stayed with my grandparents for <u>3 weeks</u>”, you can also say, “I stayed with my grandparents for <u>21 days</u>”. Both are telling us the same length of time spent with the grandparents. Hence, 3 weeks is equal to 21 days. This means that time conversion can be utilized to express the duration or length using various units. This can either be a smaller unit to a larger unit or vice versa. Thus, different time units may refer to the same period.	
C. Developing and Deepening Understanding	SUB-TOPIC 1: Conversion of time measures from smaller to larger units and vice versa 1. Explicitation In determining how much time an activity takes, choosing a reasonable unit of measurement is essential. For instance, when one wants to figure out how long a Grade 4 pupil can read one paragraph, the unit <i>seconds</i> may be used. <i>Minutes</i> can be a good choice for a short story with just a few pages. But if one is referring to reading a book with 50 pages with many paragraphs on each page, it makes more sense to use <i>hours</i>. However, different units of measure can be used in expressing the length of time an activity takes place, hence the lesson about conversion. Let us use the same examples given a while back. • minutes = 120 seconds • weeks = 21 days 2. Worked Example The teacher will ask the following questions and will write pupils’ responses on the board until the steps/rules for converting larger units to smaller units have been established. Example 1: 2 minutes = ____ seconds • How many seconds are there in 1 minute? 60 seconds • Therefore, how many seconds are there in 2 minutes? 120 seconds • How did you get the correct answer? $2 \times 60 \text{ seconds} = 120 \text{ seconds}$ • <i>RULE: To convert minutes to seconds, multiply the number of minutes (larger unit) by 60.</i>	In this part, it is crucial that the teacher only guides the pupils in developing the rules to follow in converting larger units to smaller units. The guided discovery approach needs to be evident through the questioning technique.

Example 2: 3 weeks = ____ days

- How many days are there in 1 week? 7 days
- Therefore, how many days are there in 3 weeks? 21 days
- How did you get the correct answer? $3 \times 7 \text{ days} = 21 \text{ days}$
- *RULE: To convert weeks to days, multiply the number of weeks (larger unit) by 7.*

The teacher will give additional examples and use the same questioning technique.

Example 3: 12 hours = ____ minutes

Solution: Since there are 60 minutes in 1 hour, $12 \times 60 \text{ minutes} = 720 \text{ minutes}$

RULE: To convert hours to minutes, multiply the number of hours by 60.

Example 4: 13 days = ____ hours

Solution: Since there are 24 hours in 1 day, $13 \times 24 \text{ hours} = 312 \text{ hours}$

RULE: To convert days to hours, multiply the number of days by 24.

Example 5: 3 months = ____ weeks

Solution: Since there are around 4 weeks in 1 month, $3 \times 4 \text{ weeks} = 12 \text{ months}$

RULE: To convert months to weeks, multiply the number of months by 4.

Example 6: 20 years = ____ months

Solution: Since there are 12 months in 1 year, $20 \times 12 = 240 \text{ months}$

RULE: To convert years to months, multiply the number of years by 12.

What have you noticed regarding the given values and their respective units, as well as the missing values with their corresponding units? The given values correspond to the larger units whereas the missing values correspond to the smaller units.

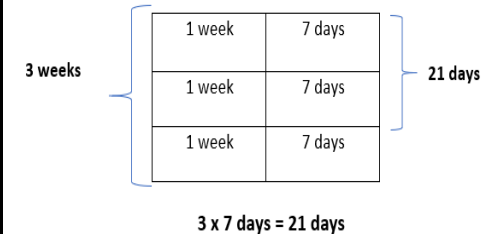
What operation is used in converting larger units to smaller units?

MULTIPLICATION

MULTI-STEP CONVERSION:

There are times when unit conversion involves multiple steps. In this case, this process can be utilized.

The teacher may show this on the board while discussing the no.2 example.



This may be shown again while the pupils are guided in developing the rules.

1 minute = 60 seconds

1 hour = 60 minutes

1 day = 24 hours

1 week = 7 days

1 month = 4 weeks

1 year = 12 months

Additionally, the teacher may consider using a table in processing rules in converting larger units to smaller units.

In this part, the teacher will help the pupils realize that the process of conversion is from a larger unit to a smaller unit and that the operation involves multiplication.

The teacher needs to thoroughly guide the pupils in this part due to the complexity of the examples.

EXAMPLE: Convert 6 days to minutes. (How many minutes are there in six days?)

Solution: 1st step: Convert 6 days to hours

$$6 \times 24 \text{ hours} = 144 \text{ hours}$$

2nd step: Convert 144 hours to minutes

$$144 \times 60 \text{ minutes} = \mathbf{8\ 640 \text{ minutes}}$$

Answer: 6 days = 8, 640 minutes

How to convert smaller units to larger units then? Let us find out using these examples. Let us first use the previous example.

Example 1: How many weeks are there in 21 days?

- How many days are there in 1 week? 7 days
- Therefore, how many weeks are there in 21 days? 3 weeks
- How did you get the correct answer? $21 \div 7 = 3$
- **RULE:** To convert days to weeks, divide the number of days (smaller unit) by 7.

Example 2: How many minutes are there in 240 seconds?

- How many seconds are there in 1 minute? 60 seconds
- Therefore, how many minutes are there in 240 seconds? 4 minutes
- How did you get the correct answer? $240 \div 60 = 4$
- **RULE:** To convert seconds to minutes, divide the number of seconds (smaller unit) by 60.

For examples 4 -7, the teacher will use the same questioning technique to arrive at the correct answer and draw out from the pupils the rest of the rules in converting smaller units to larger units.

4) 300 minutes = __ hours

5) 48 hours = __ days

6) 12 weeks = __ months

7) 132 months = __ years

RULES:

- To convert minutes to hours, divide the number of minutes) by 60.
- To convert hours to days, divide the number of hours by 24.

In processing this, the teacher may use the table below to help the pupils visualize the number of weeks in 21 days.

21 days	7 days	1 week	3 weeks
	7 days	1 week	
	7 days	1 week	

There are 3 weeks in 21 days.

$$21 \text{ days} \div 7 = 3$$

The following are the answers to **examples 4 – 7.**

4) 5 hours

5) 2 days

6) 3 months

7) 11 years

- To convert weeks to months, divide the number of weeks by 4.
- To convert months to years, divide the number of months by 12.

What have you noticed regarding the given values and their respective units, as well as the missing values with their corresponding units? The given values correspond to the smaller units whereas the missing values correspond to the larger units.

What operation is used in converting smaller units to larger units?

DIVISION

MULTI-STEP CONVERSION:

There are times when unit conversion involves multiple steps. In this case, this process can be utilized.

EXAMPLE: Convert 10, 080 minutes to weeks. (How many weeks are there in 10, 080 minutes?)

Solution: 1st Step: Convert 10 080 minutes to hours

$$10\ 080 \text{ minutes} \div 60 = 168 \text{ hours}$$

2nd Step: Convert 168 hours to days

$$168 \text{ hours} \div 24 = 7 \text{ days}$$

3rd Step: Convert 7 days to weeks

$$7 \text{ days} \div 7 = \mathbf{1 \text{ week}}$$

Answer: 10,080 minutes = **1 week**

3. Lesson Activity

The teacher will ask the pupils to convert the given examples.

I. Convert the following larger units to smaller units.

- 1) 5 months = _____ weeks
- 2) 23 minutes = _____ seconds
- 3) 22 days = _____ hours
- 4) 52 weeks = _____ days
- 5) 38 years = _____ months

II. Convert the following smaller units to larger units.

- 1) 98 days = _____ weeks
- 2) 480 minutes = _____ hours
- 3) 156 months = _____ years
- 4) 1860 seconds = _____ minutes
- 5) 1320 hours = _____ days

In this part, the teacher will help the pupils realize that the process of conversion is from a smaller unit to a larger unit and that the operation involved is division.

The teacher needs to thoroughly guide the pupils in this part due to the complexity of the examples.

The pupils may be asked to show the necessary solutions on the board.

Answers to the Lesson Activity:

Activity I

1) 20 weeks

2) 1 380 seconds

3) 528 hours

4) 364 days.

5) 456 months

Activity II

1) 14 weeks

2) 8 hours

3) 13 years

4) 31 minutes

5) 55 days

Activity III

1) 9 weeks

2) 20 160 minutes

Let us answer the given problems which involve multi-step conversions.

III. Convert the following. Show necessary solutions.

- 1) 1 512 hours = _____ weeks
- 2) 2 weeks = _____ minutes
- 3) 17 280 minutes = _____ days
- 4) 8 days = _____ seconds
- 5) 2 years = _____ days

- 3) 12 days
 - 4) 691 200 seconds
 - 5) 730 days
-

DAY 2

SUB-TOPIC 2: Word problems on conversion of time measures

1. Explicitation

Time conversion is a necessary skill with real-world applications such as scheduling activities, accomplishing a task, and spending quality time with loved ones.

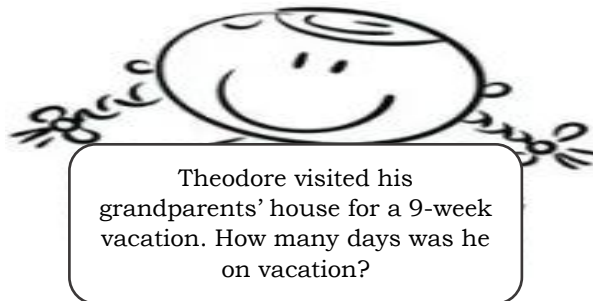


Image Source: <https://www.istockphoto.com/vector/speech-bubbles-and-signs-gm867473240-144305215>

Ask a pupil to read the word problem. To process the given word problem, the teacher will ask these questions:

1. What is asked in the problem?
2. What are the important details to remember?
3. What does the conversion entail, larger to smaller units or vice versa?

The solution will be shown on the board.

$$9 \text{ weeks} = \underline{\hspace{2cm}} \text{ days}$$

$$9 \times 7 = 63 \text{ days}$$

Therefore, Theodore spent 63 days in his grandparents' house.

The teacher can supplement the lesson by including information on the equivalent number of days in a year, 365 days (non-leap year), or, in some references, 365 $\frac{1}{4}$. A brief explanation could be provided.

Furthermore, the equivalent of 4 weeks as 1 month is just an estimate, as 4 weeks is only equivalent to 28 days and not typically the 30 or 31 days found in most months. The teacher might clarify that this estimate results in approximately 52 weeks per year and an average of 30 or 31 days per month, depending on the specific month.

2. Worked Example

Read and analyze these word problems. Show necessary solutions.

1. Based on a 2019 study, a human lives up to 73 years. How many months does an average person live?

Solution:

$$73 \times 12 \text{ months} = 876 \text{ months}$$

2. Paul can finish solving 15 complex math problems for 3,600 seconds. How many hours can he finish solving 15 complex math problems?

Solution:

Convert 3 600 seconds to minutes $\square 3600 \text{ seconds} \div 60 = 60 \text{ minutes}$

Convert 60 minutes to hours $\square 60 \text{ minutes} \div 60 = 1 \text{ hour}$

3. Rapha can run 2 kilometers in 20 minutes. Theon can run the same distance in 1 140 seconds. Who runs faster?

Solution:

Option 1: Convert unit of time to seconds

Rapha – 2 kilometers in 20 minutes

$$20 \times 60 \text{ seconds} = 1200 \text{ seconds}$$

Theon – 2 kilometers in 1 140 seconds

$$1200 > 1\,140, \text{ Therefore, Theon runs faster than Rapha}$$

Option 2: Convert unit of time to minutes

Rapha – 2 kilometers in 20 minutes

Theon – 2 kilometers in 1 140 seconds

$$1\,140 \div 60 = 19 \text{ minutes}$$

$$20 > 19, \text{ Therefore, Theon runs faster than Rapha}$$

Additional Activity (Optional):

The teacher will post the following questions.

1. When is your birthday?
2. What is the date today?
3. How old are you today? Express your exact age in different units such as years, months, days, and hours.

To process the word problems, the teacher will ask these questions:

- What is asked in the problem?
- What are the important details to remember?
- What does the conversion entail, larger to smaller units or vice versa?

In the example 3, the teacher may emphasize that there are instances when the given numbers in the word problems are not necessarily part of the number sentence or solution. Hence, not all given numbers should be included in the number sentence or solution. This highlights the extreme importance of ensuring that pupils understand the word problem.

3. Lesson Activity

The teacher will ask the pupils to answer the word problem with their partners using *Think-Pair-Share*.

1. Sebastian ran the oval area last Sunday for 10,800 seconds. How many hours did he run?
2. Every day, from Monday to Sunday, Theon spends 1 hour studying his lessons in Math. If he spends a total of 8 400 minutes studying his lessons in Math, how many weeks is that?
3. The grade 4 pupils spend 5 hours per week in their math subject. How many minutes do they have in their math lessons in 7 weeks?

DAY 3

SUB-TOPIC 3: Elapsed time in hours and minutes

1. Explicitation

The teacher will ask the pupils about the time they left their homes, and they reached the school. Ask some volunteers and record their answers using this table.

Name	Time you left your home	Time you reached the school	Duration
Anne	6:30 AM	7:15 AM	
Kim	6:05 AM	7:01 AM	
Gloria	6:54 AM	7:19 AM	
June	5:50 AM	6:48 AM	
Kenneth	6:17 AM	7:28 AM	

To get the duration, we have to compute the total amount of time passed from the time you left home to the time you reached the school. Let us try these.

Anne 6:30 to 7:00 $\Rightarrow$ 30 minutes
7:00 to 7:15 $\Rightarrow$ 15 minutes
45 minutes

Kim 6:05 to 7:00 $\Rightarrow$ 55 minutes
7:00 to 7:15 $\Rightarrow$ 15 minutes
70 minutes or 1 hour and 10 minutes

The teacher will ask the pupils to solve the rest on the board.

What do you call *the amount of time it takes an activity from start to finish*?

ELAPSED TIME

How to do Think-Pair-Share?

- The teacher will pose a question.
- The pupils will **THINK** first to themselves.
- The pupils will discuss their responses to their partner (**PAIR**).
- The pupils will **SHARE** to the whole class what they have discussed with their partner.

Answers to the Lesson

Activity:

- 1) 3 hours
- 2) 20 weeks
- 3) 2 100 minutes

The teacher will give an assignment prior to the lesson on elapsed time.

Assignment:

Record the time you will leave your homes tomorrow and the time you will reach the school.

2. Worked Example

The table shows the record of top 4 students who participated in a swimming competition. Who do you think was the champion? Show the elapsed time of each contestant.

Contestant	Time started	Time finished
1	9:58 AM	10:28 AM
2	9:45 AM	10:20 AM
3	9:50 AM	10:12 AM
4	9:40 AM	10:15 AM

Contestant 1: 9:58 AM to 10:00 AM $\Rightarrow$ 2 minutes
10:00 AM to 10:28 AM $\Rightarrow$ 28 minutes
30 minutes

Contestant 2: 9:45 AM to 10:00 AM $\Rightarrow$ 15 minutes
10:00 AM to 10:20 AM $\Rightarrow$ 20 minutes
35 minutes

Contestant 3: 9:50 AM to 10:00 AM $\Rightarrow$ 10 minutes
10:00 AM to 10:12 AM $\Rightarrow$ 12 minutes
22 minutes

Contestant 4: 9:40 AM to 10:00 AM $\Rightarrow$ 20 minutes
10:00 AM to 10:15 AM $\Rightarrow$ 15 minutes
35 minutes

Therefore, contestant 3 is the CHAMPION in the swimming competition.

3. Lesson Activity

Complete the given table.

	From	To	Elapsed Time
1	6:52 PM	8:00 PM	
2	11:12 AM	1:29 PM	
3	3:08 PM	4:05 PM	
4	4:00 PM		5 hours and 45 minutes
5		9:27 AM	46 minutes

The teacher will guide the pupils in constructing their solution.

In case the pupils have difficulty in identifying the words, “ELAPSED TIME”, the teacher may use different techniques. One of them is the **“Give Me a Letter”** technique.

How to do it?

Ask the pupils to give any letter and the teacher writes each correct response on the board. This will go on until the pupils are able to guess the words.

The teacher will guide the pupils in getting the correct answers. Their solutions may be shown on the board.

Volunteers may also be called to explain how they arrive at their answer.

Lesson Activity answers:

- 1) 1 hour and 8 minutes
- 2) 2 hours and 17 minutes
- 3) 57 minutes
- 4) 9:45 PM
- 5) 8:41 PM

Solutions for 4 and 5:

- 4) 4:00 PM to 9:00 PM $\Rightarrow$ 5 hours
9:00 PM to **9:45 PM** $\Rightarrow$ 45 minutes. Total: 5 hours and 45 minutes
- 5) 9:00 AM to 9:27 AM $\Rightarrow$ 27 minutes
46 minutes – 27 minutes = 17 minutes
60 minutes – 17 minutes = 41 minutes
Add 41 minutes to 8:00 AM, therefore the answer is **8:41 AM**

DAY 4

SUB-TOPIC 4: Word problems involving elapsed time in hours and minutes

1. Explicitation

Kim is still in school. Her last class is until 3:30 p.m. However, her school service vehicle will only fetch pupils, including her, at the exit gate until 4:10 PM. While waiting, her classmate asked for help to borrow math books from the library and go to the canteen to buy snacks. Can Kim make it back to the school gate before 4:10 p.m.? Why do you think so? If you were Kim, what would you do?



2. Worked Example

Answer this:

Raphael started writing his English essay at 6:43 PM. He finished it at 8:25 PM. How long did he spend in writing his essay?

6:43 PM to 7:00 PM $\Rightarrow$ 17 minutes

7:00 PM to 8:00 PM $\Rightarrow$ 60 minutes or 1 hour

8:00 PM to 8:25 PM $\Rightarrow$ 25 minutes

Answer: 102 minutes or 1 hour and 42 minutes

So, Raphael spent 102 minutes or 1 hour and 42 minutes writing his essay.

The teacher needs to thoroughly guide the pupils in this part due to the complexity of the examples.

The teacher will draw simple illustrations of the word problem on the board.

In this case, the teacher will make the pupils realize that their understanding of elapsed time can guide them in making a decision. Hence, values such as responsibility, time management, friendship, sharing and helping, communication, and commitment, among others can be integrated during discussions.

	Solve the following. 1. Kelvin left his house at 2:35 PM and went to the church to attend the Mass. He reached the church at precisely 3:22 PM. How long did he travel from his house to the church? Solution: 2:35 PM to 3:00 PM $\Rightarrow$ 25 minutes <u>3:00 PM to 3:22 PM $\Rightarrow$ 22 minutes</u> Answer: 47 minutes 2. Mother started cooking <i>sinigang</i> for lunch at 10:20 AM. It took her 1 hour and 18 minutes to finish the whole process. What time did she finish? Solution: 10:20 AM to 11:00 AM $\Rightarrow$ 40 minutes <u>11:00 AM to 11:38 AM $\Rightarrow$ 38 minutes</u> Answer: Total of 78 minutes or 1 hour and 18 minutes 3. Lesson Activity Answer the following. Show necessary solutions. 1. Paul arrived at a bookstore at 5:35 PM. Traveling from his school to the bookstore took him 1 hour and 12 minutes. What time did he leave his school? 2. Sebastian wakes up at 5:45 in the morning. He washes his face and takes his breakfast for 35 minutes, brushes his teeth for 5 minutes, and plays with his younger brother for 1 hour. After playing with his younger brother, he watches his favorite cartoon show. What time does he start watching his favorite cartoon show?	Aside from pupils showing their solutions on the board, they may be encouraged to draw simple illustrations for each word problem. This technique helps them visualize the scenarios more clearly which can improve their understanding of the word problems. In 2nd example, the teacher may stress the following: Since 1 hour = 60 minutes, 60 minutes – 40 minutes = 20 minutes. 20 minutes plus the remaining 18 minutes is 38 <i>minutes</i> Lesson Activity Answers: 1) 4:23 PM 2) 7:25 AM												
D. Making Generalizations	1. Learners' Takeaways The teacher will guide the pupils in completing this table. <table><tr><td><i>Key Ideas/ Concepts</i></td><td><i>What I've Learned from the Discussion</i></td><td><i>Concepts that are Somewhat Confusing</i></td><td><i>Concepts I Totally Don't Understand</i></td></tr><tr><td>Converting larger to smaller units</td><td></td><td></td><td></td></tr><tr><td>Converting smaller to larger units</td><td></td><td></td><td></td></tr></table>	<i>Key Ideas/ Concepts</i>	<i>What I've Learned from the Discussion</i>	<i>Concepts that are Somewhat Confusing</i>	<i>Concepts I Totally Don't Understand</i>	Converting larger to smaller units				Converting smaller to larger units				
<i>Key Ideas/ Concepts</i>	<i>What I've Learned from the Discussion</i>	<i>Concepts that are Somewhat Confusing</i>	<i>Concepts I Totally Don't Understand</i>											
Converting larger to smaller units														
Converting smaller to larger units														

	Solving word problems on conversion			
	Finding the elapsed time			
	Solving word problem on elapsed time			
2. Reflection on Learning The pupils will complete this statement: <i>"I realized that learning about time conversion and elapsed time can be fascinating and essential because_____."</i>				

IV. EVALUATING LEARNING: FORMATIVE ASSESSMENT AND TEACHER’S REFLECTION				NOTES TO TEACHERS
A. Evaluating Learning	DAY 5			Answers to Formative Assessment: I. Conversion A. Larger to Smaller Units 1) 140 days 2) 480 seconds 3) 204 months 4) 432 000 seconds 5) 8 weeks B. Smaller to Larger Units 1) 87 minutes 2) 56 years 3) 175 days 4) 3 years 5) 25 days II. Elapsed time 1) 70 minutes of 1 hour and 10 minutes
	1. Formative Assessment			
	I. Convert the following.			
	A. Larger to Smaller Units		B. Smaller to Larger Units	
	1. 20 weeks = ____ days 2. 8 minutes = ____ seconds 3. 17 years = ____ months 4. 5 days = ____seconds 5. 2 months = ____ weeks		1. 5 220 seconds = __ minutes 2. 672 months = __ years 3. 4 200 hours = ____ days 4. 1 095 days = __ years 5. 36 000 minutes = __ days	
	II. Complete the table.			
		From	To	Elapsed Time
	1	6:33 PM	7:43 PM	
	2	9:01 AM	11:18 AM	
	3	5:47 AM	6:31 AM	
	4		2:45 PM	2 hours and 8 minutes
	5	1:41 PM		minutes

	III. Solve the following word problems. Show necessary solutions. 1. It takes 2 100 seconds for Kelvin to get home. How many minutes does it take him to get home? 2. Jenny's dog is 7 years old. What is the dog's age in months? 3. Matthew took 1 hour and 18 minutes to memorize a two-paragraph poem. He finished learning it by 7:30 p.m. What time did he start? 4. Yumi's family drove from Angeles City to Makati City in 2 hours and 28 minutes. How many seconds did they drive? 5. Shanelle and her sister played at 9:25 in the morning. They played for 2 hours and 50 minutes. What time did they finish playing? 2. Homework (Optional)			2) 2 hours and 17 minutes or 137 minutes 3) 44 minutes 4) 12:37 PM 5) 2:40 PM III. Problem Solving 1) 35 minutes 2) 84 months 3) 6:12 PM 4) 8 880 seconds 5) 12:15 PM
B. Teacher's Remarks	<i>Note observations on any of the following areas:</i>	Effective Practices	Problems Encountered	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.
	strategies explored			
	materials used			
	learner engagement/ interaction			
	others			
C. Teacher's Reflection	<i>Reflection guide or prompt can be on:</i> • <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?			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.