

 GRADES 1 to 12 DAILY LESSON LOG	School:		Grade Level:	IV
	Teacher:		Learning Area:	MATHEMATICS
	Teaching Dates and Time:	OCTOBER 3 – 7, 2022 (WEEK 7)	Quarter:	1ST QUARTER

	LUNES	MARTES	MIYERKULES	HUWEBES	BIYERNES
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I. OBJECTIVES				
A. Content Standards	Demonstrates understanding of multiplication and division of whole numbers including money			
B. Performance Standards	Is able to apply multiplication and division of whole numbers including money in mathematical problems and real-life situations			
C. Learning Competencies/ Objectives (Write the LCcode for each)	Estimates the quotient of 3- to 4-digit dividends by 1- to 2-digit divisors with reasonable results. M4NS-Ig-55.2			
II. CONTENT (Subject Matter)	Estimating Quotients At the end of this lesson, you will be able to estimate the quotient of 3- to 4-digit dividends by 1- to 2-digit divisors with reasonable results.	Dividing 3- to 4-digit Numbers by 1- to 2-digit Numbers At the end of this lesson, you will be able to divide 3- to 4-digit numbers by 1-to 2-digit numbers without and with remainder.	Solving Multi-step Problems Involving Multiplication and Addition or Subtraction At the end of this module, you will be able to solve multi-step routine and non-routine problems involving multiplication and addition or subtraction using appropriate problem solving strategies and tools.	
III. LEARNING RESOURCES				
A. References				
1. Teacher's Guide pages	Math 4, Module 10	Math 4, Module 10	Math 4, Module 10	Math 4, Module 7
2. Learner's Material pages				
3. Textbook pages				

4. Additional Materials from Learning Resource LR portal			
B. Other Learning Resources	Flashcards, pictures, illustrations	Cutouts, activity sheets, pictures	Cutouts, activity sheets, pictures
IV. PROCEDURE			
	What I Know A. Estimate the quotients, then choose the most appropriate answer. 1. $13 \overline{) 6\,347}$ a. 6 b. 60 c. 600 d. 6000 2. $75 \overline{) 4\,224}$ a. 5 b. 50 c. 500 d. 5000 3. $38 \overline{) 7\,342}$ a. 175 b. 157 c. 751 d. 517 4. $12 \overline{) 8\,732}$ a. 9 b. 90 c. 900 d. 9000 5. $24 \overline{) 375}$ a. 2 b. 20 c. 200 d. 2000 6. $18 \overline{) 5\,236}$ a. 26 b. 260 c. 620 d. 255 7. $28 \overline{) 5\,623}$ a. 20 b. 200 c. 300 d. 300 B. Read each problem, then solve. 8. If a kilogram of watermelon costs ₱35, about how many kilograms can you buy with ₱750? 9. Which is a better option if you want to save money: one box of 8 slices of egg pie at ₱247 or one slice of egg pie at ₱32? Assume that you need 8 slices of egg pie. 10. About how many 25s are there in 6 428?	What More Activity 1 Estimate the following using the Rounding Method. 1. $4\,108 \div 82$ 4. $8\,501 \div 9$ 2. $573 \div 6$ 5. $2\,124 \div 17$ 3. $9\,234 \div 28$ Activity 2 Estimate the following using the Compatible Number Method. 1. $3\,208 \div 18$ 4. $4\,562 \div 94$ 2. $3\,613 \div 56$ 5. $8\,321 \div 24$ 3. $9\,546 \div 16$	Assessment A. Estimate the quotients of the following. Choose the letter of the correct answer. 1. $765 \div 7$ a. 700 b. 110 c. 70 d. 10 2. $843 \div 4$ a. 210 b. 201 c. 120 d. 102 3. $5\,357 \div 25$ a. 160 b. 216 c. 225 d. 230 4. $8\,345 \div 43$ a. 400 b. 250 c. 200 d. 20 5. $4\,678 \div 37$ a. 135 b. 130 c. 126 d. 125 B. Find the estimated quotient. 6. $876 \div 5$ 7. $1\,843 \div 16$ 8. $6\,432 \div 83$ C. Solve each problem. 9. About how many dozens are there in 105 pieces? 10. There are 672 books to be distributed among 4 classes. About how many books will be given to each class?
	What's In Before we proceed with our new lesson, let us have a review in rounding off and dividing numbers.	What I Have Learned How do we estimate the quotient of 3- to 4-digit dividends by 1- to 2-digit divisors with reasonable results?	Additional Activities A. Use estimation to tell whether the exact quotient is less than or greater than the given number.

	A. Round the following numbers to the highest place value. 1. 4 672 2. 832 3. 5 821 4. 9 462 5. 7 732 B. Find the quotients. 6. $3\,639 \div 3$ 9. $1\,052 \div 4$ 7. $4\,900 \div 7$ 10. $378 \div 9$ 8. $568 \div 8$	• To estimate the quotients, use either of the two methods: A. Rounding Method: Round the dividend and divisor to the highest place value and then divide. B. Compatible Number Method: Use numbers in the dividend and divisor that can be divided compatibly.	1. $5 \overline{)3476}$ < 400 or > 400 2. $18 \overline{)4\,534}$ < 250 or > 250 3. $6 \overline{)1927}$ < 300 or > 300 B. Read and solve. 4. Which would you buy, one kilogram of fabric conditioner at ₱280 or 6 small packs of 54 grams each of the same fabric conditioner at ₱94 per pack? Why?
	What’s New What is your favorite fruit? Do you like avocados? Avocado is a super fruit rich in essential nutrients that our body needs. Read the problem. Mr. Enriquez harvested 1 675 avocados in his orchard. He plans to place 23 avocados in a basket. About how many baskets will he need? How will you find the answer to this problem? What is It You can answer the question by estimating the quotient of 1 675 and 23. Let us see if we have the same answer. The phrase “about how many” does not ask for an actual answer but an estimate. That is, you will estimate the quotient in solving the problem. Consider the two methods below and try to find out which method is closer to the actual answer. A. Rounding Method: Rounding the dividend and divisor to the highest or greatest place value.	What I Can Do A. Estimate the quotients to answer the following: 1. About how many 52s are there in 1 324? 2. About how many minutes are there in 3 568 seconds? 3. About how many 26s are there in 5 867? B. Estimate each quotient. Then, compare the two estimated quotients by writing $>$, $<$ or $=$. 4. $3\,672 \div 35$ $3\,452 \div 32$ 5. $645 \div 5$ $567 \div 6$ 6. $6\,543 \div 65$ $7\,027 \div 67$	

B. Compatible Number Method: Using numbers (dividend and divisor) which can be divided compatibly.

Rounding Method	Compatible Number Method	Actual Answer
$\begin{array}{r} 23 \overline{)1675} \\ \downarrow \downarrow \\ 20 \overline{)2000} \end{array}$	$\begin{array}{r} 23 \overline{)1675} \\ \downarrow \downarrow \\ 20 \overline{)1600} \end{array}$	$\begin{array}{r} 72 \text{ r.}19 \\ 23 \overline{)1675} \\ - 161 \\ \hline 65 \\ - 46 \\ \hline 19 \end{array}$
$\begin{array}{r} 100 \\ 20 \overline{)2000} \\ - 20 \\ \hline 0 \\ - 0 \\ \hline 0 \\ - 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 80 \\ 20 \overline{)1600} \\ - 16 \\ \hline 0 \\ - 0 \\ \hline 0 \\ - 0 \\ \hline 0 \end{array}$	

Actual Answer: **He needs 72 baskets with 23 avocados each and there will be remaining19 avocados.**

If the rounding method is used, he needs about **100** baskets.

If compatible number method is used, he needs about **80** baskets.

Which of the two estimates is closer to the actual answer?

The estimate using Compatible Number Method provides the closer estimate with about 80 baskets.

Therefore, Mr. Enriquez needs about 80 baskets.

The use of estimating is to get close to real answers as quick as possible. **Rounding Method** is used if the numbers rounded to its highest place value are easy to divide. However, if the rounded numbers do not go in easily or exact, **Compatible Number Method** is used. Compatible numbers are numbers that are easy to compute mentally.

Example: $4\ 923 \div 7$

If we use Rounding Method:

$$7 \overline{) 4923} \longrightarrow 7 \overline{) 5000}$$

Notice that 50 cannot be divided exactly by 7.
So, we use Compatible Number Method.

Are 7 and 49 compatible numbers?

Yes! 49 is a multiple of 7 (7, 14, 21, 28, 35, 42, **49**...).

$$7 \overline{) 4923} \longrightarrow 7 \overline{) 4900} = 700$$

Therefore, in this problem, Compatible Number Method is the best method to use.

Below are some other examples. Study them.

$784 \div 5$

$$\begin{array}{r} 5 \overline{) 784} \\ \downarrow \\ 5 \overline{) 800} \\ \begin{array}{r} - 5 \\ \hline 30 \\ - 30 \\ \hline 0 \\ - 0 \\ \hline 0 \end{array} \end{array}$$

$7\ 562 \div 14$

$$\begin{array}{r} 14 \overline{) 7562} \\ \downarrow \\ 10 \overline{) 7500} \\ \begin{array}{r} - 70 \\ \hline 50 \\ - 50 \\ \hline 0 \\ - 0 \\ \hline 0 \end{array} \end{array}$$

OR

$$\begin{array}{r} 800 \\ 10 \overline{) 8000} \\ \begin{array}{r} - 80 \\ \hline 0 \\ - 0 \\ \hline 0 \\ - 0 \\ \hline 0 \end{array} \end{array}$$

$3\ 294 \div 8$

$$\begin{array}{r} 8 \overline{) 3294} \\ \downarrow \\ 8 \overline{) 3200} \\ \begin{array}{r} - 32 \\ \hline 0 \\ - 0 \\ \hline 0 \\ - 0 \\ \hline 0 \end{array} \end{array}$$

E. Which of my teaching strategies worked well? Why did these work?	<i>Strategies used that work well:</i> ___ Group collaboration ___ Games ___ Power Point Presentation ___ Answering preliminary activities/exercises ___ Discussion ___ Case Method ___ Think-Pair-Share (TPS) ___ Rereading of Paragraphs/Poems/Stories ___ Differentiated Instruction ___ Role Playing/Drama ___ Discovery Method ___ Lecture Method <i>Why?</i> ___ Complete IMs ___ Availability of Materials ___ Pupils' eagerness to learn ___ Group member's Cooperation in doing their tasks	<i>Strategies used that work well:</i> ___ Group collaboration ___ Games ___ Power Point Presentation ___ Answering preliminary activities/exercises ___ Discussion ___ Case Method ___ Think-Pair-Share (TPS) ___ Rereading of Paragraphs/Poems/Stories ___ Differentiated Instruction ___ Role Playing/Drama ___ Discovery Method ___ Lecture Method <i>Why?</i> ___ Complete IMs ___ Availability of Materials ___ Pupils' eagerness to learn ___ Group member's Cooperation in doing their tasks	<i>Strategies used that work well:</i> ___ Group collaboration ___ Games ___ Power Point Presentation ___ Answering preliminary activities/exercises ___ Discussion ___ Case Method ___ Think-Pair-Share (TPS) ___ Rereading of Paragraphs/Poems/Stories ___ Differentiated Instruction ___ Role Playing/Drama ___ Discovery Method ___ Lecture Method <i>Why?</i> ___ Complete IMs ___ Availability of Materials ___ Pupils' eagerness to learn ___ Group member's Cooperation in doing their tasks	<i>Strategies used that work well:</i> ___ Group collaboration ___ Games ___ Power Point Presentation ___ Answering preliminary activities/exercises ___ Discussion ___ Case Method ___ Think-Pair-Share (TPS) ___ Rereading of Paragraphs/Poems/Stories ___ Differentiated Instruction ___ Role Playing/Drama ___ Discovery Method ___ Lecture Method <i>Why?</i> ___ Complete IMs ___ Availability of Materials ___ Pupils' eagerness to learn ___ Group member's Cooperation in doing their tasks	<i>Strategies used that work well:</i> ___ Group collaboration ___ Games ___ Power Point Presentation ___ Answering preliminary activities/exercises ___ Discussion ___ Case Method ___ Think-Pair-Share (TPS) ___ Rereading of Paragraphs/Poems/Stories ___ Differentiated Instruction ___ Role Playing/Drama ___ Discovery Method ___ Lecture Method <i>Why?</i> ___ Complete IMs ___ Availability of Materials ___ Pupils' eagerness to learn ___ Group member's Cooperation in doing their tasks
F. What difficulties did I encounter which my principal or supervisor can help me solve?	___ Bullying among pupils ___ Pupils' behavior/attitude ___ Colorful IMs ___ Unavailable Technology Equipment (AVR/LCD) ___ Science/ Computer/ Internet Lab ___ Additional Clerical works	___ Bullying among pupils ___ Pupils' behavior/attitude ___ Colorful IMs ___ Unavailable Technology Equipment (AVR/LCD) ___ Science/ Computer/ Internet Lab ___ Additional Clerical works	___ Bullying among pupils ___ Pupils' behavior/attitude ___ Colorful IMs ___ Unavailable Technology Equipment (AVR/LCD) ___ Science/ Computer/ Internet Lab ___ Additional Clerical works	___ Bullying among pupils ___ Pupils' behavior/attitude ___ Colorful IMs ___ Unavailable Technology Equipment (AVR/LCD) ___ Science/ Computer/ Internet Lab ___ Additional Clerical works	___ Bullying among pupils ___ Pupils' behavior/attitude ___ Colorful IMs ___ Unavailable Technology Equipment (AVR/LCD) ___ Science/ Computer/ Internet Lab ___ Additional Clerical works
G. What innovation or localized materials did I use/discover which I wish to share with other teachers?	<i>Planned Innovations:</i> ___ Localized Videos ___ Making use big books from views of the locality ___ Recycling of plastics to be used as Instructional Materials ___ local poetical composition	<i>Planned Innovations:</i> ___ Localized Videos ___ Making use big books from views of the locality ___ Recycling of plastics to be used as Instructional Materials ___ local poetical composition	<i>Planned Innovations:</i> ___ Localized Videos ___ Making use big books from views of the locality ___ Recycling of plastics to be used as Instructional Materials ___ local poetical composition	<i>Planned Innovations:</i> ___ Localized Videos ___ Making use big books from views of the locality ___ Recycling of plastics to be used as Instructional Materials ___ local poetical composition	<i>Planned Innovations:</i> ___ Localized Videos ___ Making use big books from views of the locality ___ Recycling of plastics to be used as Instructional Materials ___ local poetical composition