Republic of the Philippines

**Department of Education**

Region V (Bicol)

DIVISION OF CATANDUANES

Virac, Catanduanes

Lesson Plan in Mathematics

WEEK 9

***Lesson 26.2***

*Dividing Whole Numbers by a Fraction and Vice Versa*

**I – OBJECTIVES:**

 *Divides whole numbers by a fraction and vice versa* (M5NS – Ii – 96.1)

 *Write the equation and the solution in dividing whole numbers and fractions*

 *Appreciate the value of helping/taking part in doing some household chores*

 *Value Focus: Helpfulness and accuracy*

 *Prerequisite skills and concepts:*

* Finding the reciprocal
* Cancellation
* Renaming whole numbers to fractions

*Materials:* Show-Me-Board

*References:* K to 12 Grade 5 Curriculum Guide page 56

 *www.mathsisfun.*com

**II – INSTRUCTIONAL PROCEDURE:**

1. ***Preliminary Activities:***

 *1. Drill/Review:*

1. Teacher flashes an equation similar to the example below
2. 8/9 ÷ 4/3
3. 5/12 ÷ 1/3
4. 5/6 ÷ 2/9
5. 4/10 ÷ 2/6
6. 18/30 ÷ 6/9
7. When the teacher gives the “go” signal, the pupils raise their show-me-boards containing the value of N.
8. This activity continues for 3 to 5 minutes.
9. *Motivation:*

*What do you do after going home from school?*

*Why do you help your family in doing the chores?*

*Is it important to do the assigned task for you? Why?*

1. ***Developmental Activities:***
2. *Presentation:*

After coming from school, Andoy’s work at home is to fetch water for cooking needs. He uses a gallon to fill 3 jars. If a gallon contains only 1/4 of water in the jar, how many times is needed for him to fetch water to fill the jars?

* Group Activity

Group A – Solving by acting out the problem

Group B – Solving through Illustration

1. *Processing the Activities:*

Group Reporting

Discussion

 Ask comprehension questions

Who helps his family in doing household chores?

What did Andoy do to help his family?

Value Infusion:

 What kind of pupil is Andoy? Do you also help your family at home in doing the task? Why? Is it important to do the assigned task to you? Why?

Let’s go back to the problem.

 Discussion of the group output

 How did group 1 solve the problem? (by acting out the problem)

 How about group 2? (through illustration)

 Do you think they arrived with the correct answer?

 Is it easy to solve the problem by acting out or through illustration?

 (Note: The teacher connects the lesson.)

 This time we are going to solve the same problem in an easier way and that is through equation.

 What is the operation involve in the problem?

 What are you going to divide?

 Explain to the pupils how to solve the problem using an equation.

1. *Reinforcing the Concept and Skill*

*Solve.*

1. *How many pupils will be served from 20 cups of fruit juice if each pupil drinks*

*2/3 cups?*

1. *Mang Lucio wants to divide equally his 8/9 hectare of rice fields among his 4*

*children. What part of the land will each child get?*

*(Note: Discussion follows after the pupils solve the given problems)*

1. *More practice using the new learned techniques.*

Tell how many:

1. 2/3s are there in 5? \_\_\_\_\_\_\_\_\_
2. 1/5s are there in 4? \_\_\_\_\_\_\_\_\_
3. 20s are there in 5/8? \_\_\_\_\_\_\_\_
4. 60s are there in 10/12? \_\_\_\_\_\_
5. 5/6 are there in 20?\_\_\_\_\_\_\_\_\_
6. *Summarizing the Lesson*

Guide the pupils to give generalization by asking questions.

How do we divide a whole number a fraction? How about fraction by a whole

 number?

 To divide a fraction by a whole number, change the divisor to a fraction form then multiply the reciprocal of the divisor.

 To divide a whole number by a fraction, change the dividend to a fraction form then multiply the reciprocal of the divisor.

1. *Applying to New Other Situations:*

Use the symbol >, < or = to compare the given equations. Write the appropriate symbol in the box.

1. 1/4 ÷4 4 ÷ 1/4
2. 3 ÷ ½ ½ ÷ 3
3. 38 ÷ ½ 24 ÷ 1/8
4. 5/8 ÷ 20 8/9 ÷ 2
5. 9/11 ÷ 54 54 ÷ 6/8
6. ***Assessment:***

*I – Divide then simplify all answers.*

1. 16 ÷ 1/5 = n
2. 9/10  ÷ 18 = n
3. 5/6  ÷ 10 = n
4. 16 ÷ 4/7 = n
5. 7/8  ÷ 14 = n

 *II – Solve each problem.*

1. How many ¼ metre pieces can Shiela cut from a piece of wire 12 metres long?
2. How many ¾ hour period are there in 8 hours?
3. ***Home Activity:***
4. *Remediation:*
5. Find the quotient and simplify if needed.
6. 4/5  ÷ 8 = b. 48 ÷ 4/5  =
7. 10 ÷ 1/8 = c. 4/9 ÷ 80 =
8. Solve:

Mr. Rodriguez has a bamboo 7/9 metre long. He has to divide it equally into 14

pieces. How long will each piece be?

1. *Enrichment:*

Analyze and solve.

1. Jess spent 2/5 of an hour solving 8 problems in Math. What fraction of an hour did he spend solving each problem?
2. Marie equally poured 4/5 liter of lemonade into 6 cups. How much lemonade did each cup have?
3. 1f 2/5 of a number is 14, what is 3/7 of the number?

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*Noted:*

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*EPS I- Mathematics*