

DAILY LESSON PLAN

Math GRADE:4

(NO.9/13)

INTERNATIONAL DAILY LESSON PLAN

Unit 3: Fractions.

Date: _____

Topic: Multiplying a Fraction by a Whole Number.

Year Level: 4

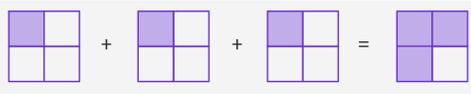
Key Learning Area: proper fraction, Improper fraction, mixed fractions,
Multiplication, word problems.

Outcomes: Students will be multiply the fractions through visual pictures.

- Students will be able to apply the multiplication of fraction in real life situations.
- Students will be able to solve through subtraction of fraction.

Lesson Structure:

Time	Introduction (Set):	Teaching Approaches
10 min.	Teacher will introduce the lesson by recalling multiplication. Tell your students that we know that multiplication is repeated addition . So, multiplying a fraction by a whole number is equivalent	Multiplication Revision: Teacher will recall simple 2-digit numbers multiplications with the students. Solve some of the questions on n the board. Ask some

<p>to adding the fraction for the whole number of times.</p> <p>Illustrate the multiplication through picture. After that show the same examples in numerical form.</p> <p>For example:</p> $3 \times \frac{1}{4}$ <p>Teacher will elaborate it as this fraction has already been shown through pictures. Now Algebraically this means,</p> $3 \times \frac{1}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{1+1+1}{4} = \frac{3}{4}$ <p>Once the students get the idea, tell the students that today we are going to learn about “multiplication of the fractions by a whole number.”</p>	<p>questions about multiplicative tables too.</p> <p>Multiplication of a Fraction as Repeated Addition:</p> <p>Teacher will demonstrate the example of multiplication of a fraction with a whole number on the board.</p> <p>Visualize the multiplication of a fraction through <i>LEGO Blocks</i> or <i>simply just draw the fractional</i></p>  <p><i>pictures on the board as:</i></p>
--	---

LESSON STRUCTURE:

Time	Main Content:	Teaching Approaches
------	---------------	---------------------

25
min.

Steps for Multiplying the Fraction with a Whole Number:

Number:

Teacher will explain the steps as:

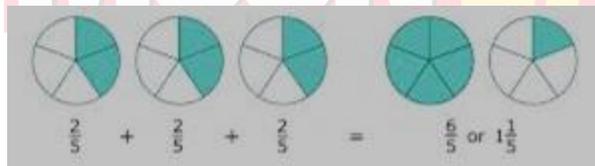
Step 1: Multiply the numerator by the whole number.

Step 2: Keep the denominator same.

Step 3: Convert the improper fraction into mixed number by dividing the numerator by the denominator.

Conversion of Improper Fraction into Mixed Number/Fraction.

Teacher will explain the conversion of the method 1 answer into mixed number format through pictorial representation :



Word Problems:

Teacher will introduce the related word problems from the *incredible Mathematics of grade 4 book*, pages number 81 and 82. Some of the questions from these pages may carry indirect information.

Encourage students to think about such information and to bring it to a form which they can use to solve the problems.

Method 1:

Some students may find it confusing to multiply a whole number with the fraction. So, the simplest way to end the confusion is, write the whole number as a fraction with denominator of 1 as:

$$3 \times \frac{2}{5}$$

$$3 = \frac{3}{1}$$

Now multiply the both numerators and the denominators as:

$$\frac{3}{1} \times \frac{2}{5} = \frac{3 \times 2}{1 \times 5} = \frac{6}{5}$$

Now as the answer is greater than 1 it can be write into mixed fraction/number as:

$$\frac{6}{5} = 1 \frac{1}{5}$$

Method 2:

A faster method is to just multiply the whole number by the numerator on the top of the fraction, leave the denominator as it is:

$$3 \times \frac{2}{5} = 6/5$$

Daily Life-Related Problems:

	<p>Mind Teasers:</p> <p>Give some mind-teasers referring to the same problems. Challenge the students to come on the board and solve the question:</p> <ul style="list-style-type: none"> • What number is $\frac{1}{4}$ of 18? <p>Once the students get enough practice in the class, encourage students to give an example of a real world situation where they would have to multiply a whole number with the fractions. Ask them how would you explain and how to do it?</p>	<p>To help students understand the word problems, start with a simple example as:</p> <p>Zahid drinks $\frac{2}{7}$ of a carton of milk each day. How much milk does he drink in 3 days?</p> <p>Teacher will read the example and help the students to extract the data from statement and then solve it on the board.</p>
--	---	---



Time	Conclusion:	Teaching Approaches
5 min.	<ul style="list-style-type: none"> • Students will be multiply the fractions through visual pictures. • Students will be able to apply the multiplication of fraction in real life situations. • Students will be able to solve through subtraction of fraction. 	<p>Review the lesson with students.</p> <p>Ask students, "what did we learn about multiplication of fractions today"?</p> <p>Give enough practice as homework</p> <p>Ask for questions.</p>

Resources:

Board, board marker, Multiplication of fraction real life-related worksheets, Multiplication of fraction worksheets, Incredible Mathematics Grade 4 book, notebooks etc.

Safety Consideration/ Materials

None

Assessment

Related worksheets

Board test

Mind-teasers.

Quiz etc.

Reflection

The students have understood that how to:

- Multiply the fractions through visual pictures.
- Stepwise multiply the fraction by a whole number using both methods.
- Apply the multiplication of fraction in real life situations.