Solving Word Problems involving Addition of Similar Fractions without Regrouping

I. Learning Objectives

Cognitive: Solve word problems involving addition of similar fractions without regrouping
Psychomotor: Make illustrations in solving word problems
Affective: Show cooperation in solving word problems

II. Learning Content

Skills: 1. Solving word problems involving addition of similar fractions without regrouping.
2. Making illustrations in solving word problems
References: BEC-PELC II.D.3.1
textbooks in Math 4
Materials: flash cards, word problems written on manila paper or pieces of paper, learning activity sheet
Value: Cooperation

III. Learning Experiences

A. Preparatory Activities

1. Drill

Oral drill on adding basic addition facts using flash cards

8	5	4	6	7
+ 1	+ 3	+ 5	+ 2	+ 2

2. Review

Addition of similar fractions using flash cards

$\frac{2}{5}+\frac{1}{5}=$ $\frac{3}{8}+\frac{2}{8}=$ $\frac{4}{10}+\frac{2}{10}=$ $\frac{5}{9}+\frac{3}{9}=$

3. Motivation

Is it important to join in your school activities? Why? How do you feel when joining school activities like field trips?

B. Developmental Activities

1. Presentation

a. Read and understand well this problem.

The Grade 4 class will hold their party for winning the cleanliness contest. They will hold their party in the school hall. Two-fourths of the class will clean the hall and ¼ will decorate it. What part of the class will clean and decorate the hall?

Help them in the analysis of data by answering some questions like:
1) What are given in the problem?

2) What is asked in the problem?
3) What operation will you use? Why?
4) What is the number sentence? $^2/_4 + ¼ =$ N
5) Have them make the necessary computation.

$^2/_4 + ¼ = {}^3/_4$ of the class will clean and decorate the hall.

b. Read and solve this problem.

Mrs. Bustamante bought a rectangular cake. She divided it into 8 equal parts. Her son ate $^3/_8$ and her daughter ate $^2/_8$ of. How many parts of the cake were eaten?
1) What will you do to solve the problem?
2) Finish the illustration given by shading the needed part then find the answer.

_____ + _____ = _____

2. Guided Practice

(At this point, remind the pupils the importance of participating actively in all activities that will be given them.)

Write these word problems on pieces of paper. Fold them and put them in a box.

Divide the class into three to four groups. Have each group draw one problem from the box. Give each group 15 seconds to discuss the problem. Ask a group member to solve the problem on the board. Check it afterwards.

1) Dindo had a painting session in his art class. He painted $^2/_5$ of the oslo paper blue and $^1/_5$, green. What part of the paper is painted blue and green?
2) The grade 4 pupils will decorate $^1/_8$ of the stage with flowers and 6/8 with curtains. What part of the stage will be decorated?
3) Nilo harvested $^5/_{11}$ kilogram of pechay and $^4/_{11}$ kilogram of string beans. How many kilograms of vegetables did he harvest in all?

3. Generalization

How do we solve word problems?

To solve word problems, identify the given facts, what is asked and determine the operation to be used, then find the correct answer by doing the necessary computations.

C. Application

Read and solve on your paper.

Tootsie spent $^2/_4$ of an hour sweeping the yard and ¼ of an hour watering the plants. How long did she work?

IV. Evaluation

A. Read and solve the problems carefully. Remember the steps in problem solving.

1. Charisse spent $^2/_3$ of an hour for scrubbing and sweeping the floor and $^1/_3$ hour wiping the furniture. How long did she work in the living room?
2. Bernard bought $^3/_9$ kg of peanuts in the morning and $^2/_9$ kg of cashew nuts in the afternoon. How many kg of nuts does he have?
3. Mother brought home a ripe papaya. She gave Randy $^1/_6$ and Arianne $^2/_6$. What part of the whole papaya did she give to the children?

B. Read and solve these problems correctly.

1. Bobby likes to walk. This morning, he walked $^2/_7$ kilometre from his house to Tommy's house. Then he walked $^3/_7$ kilometre from Tommy's house to the market. What is the total distance that Bobby walked?
2. Two-fifths piece of wood was used by Mang Jose to make the roof of the doghouse while $^3/_5$ piece of wood was used to make the walls. How much wood was used for the doghouse?
3. Philip picked $^3/_8$ basketful of mangoes. Robert picked $^2/_8$ basketful of Chico while Richard picked $^1/_8$ basketful of papaya. How may basketful of fruits did the boys pick in all?

C. Solve these problems. Make some necessary illustrations.

1. Marco is working on his science project. He spent $^3/_{12}$ of an hour in the morning, $^2/_{12}$ of an hour in the afternoon and $^4/_{12}$ of an hour in the evening. How much time did Marco spend on his project?
2. Mrs. Santos used $^1/_8$ cup of celery, $^1/_8$ cup of carrots, $^2/_8$ cup of mushroom and $^3/_8$ cup of cabbage in her vegetable salad. How much vegetables did she use?
3. Robin was asked to make the props for the school play. He used $^3/_9$ roll of green ribbon, $^1/_9$ roll of yellow ribbon and $^2/_9$ roll of red ribbon. How many roll of ribbon did he use?

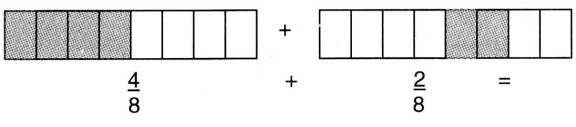
V. Assignment

Read and solve following the steps in problem solving.

1. Mother bought a whole pizza and sliced it into 6 equal parts. She ate $^1/_6$ of the pizza and her son ate $^2/_6$ of it. What part of the whole pizza was eaten?
2. Lara sold 3 pieces of ribbon. One piece was $^2/_{10}$ metre long, another piece was $^3/_{10}$ metre long, and the third piece was $^1/_{10}$ metre long. What was the total length of the ribbon sold?

Construct problems about addition of similar fractions. Make use of the given illustrations. Analyze them carefully.

1)



2)