

The Problem With Word Problems Is the Words!

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Our goals are to help students:

- Value mathematics
 - Communicate mathematically
 - Become confident in solving math problems
 - Become strategic problem solvers.
1. Use “Doctor Rounds Simulation”
 2. Separate process from content.
 3. Use graphic organizers & focusing tools.
 4. Teach the Singapore “modeled drawing” approach to solving word problems. (Concrete-Pictorial-Abstract)

Example: Mrs. Washington made 300 cookies. She sold $\frac{3}{4}$ of them and gave $\frac{1}{3}$ of the remainder to her neighbor. How many cookies did she have left for herself?

5. Jay has \$2 more than Jim. If Jim has \$10, how much money do they have altogether?

6. Kim had 52 erasers. She bought another 3 boxes of 10 erasers each. How many erasers did she have altogether?

7. Fred had as many coins as Jeff. Fred lost 11 coins, while Jeff collected another 24 coins. How many more coins did Jeff have than Fred in the end?

8. Mary had 24 stamps. Amy had 3 times as many stamps as Mary. How many stamps did they have altogether?

9. $\frac{2}{5}$ of a number is 12. What is $\frac{7}{10}$ of that number?

10. The ratio of red marbles to blue is 3 to 4. If there are 35 marbles altogether, how many red marbles are there?

11. There are 1,600 students in a school. 60% of them are girls. How many more girls than boys are there?

12. Tina has 12 more pineapples than Mary. If they have 28 pineapples altogether, find the number of pineapples Tina has.

DOCTOR ROUNDS FOR PROBLEM SOLVING

Simulation Vocabulary

- Patient = Problem
- Symptoms = Arithmetic Vocabulary
- Diagnose = Choose Operation
- Operate = Solve
- Final Check-Up = Is The Answer Reasonable?

Group Roles:

- Chief of Surgery = Leader – Poses Question
- Pathologist = Identifies The Facts (Symptoms)
- Diagnostitian = Chooses Arithmetic Operation
- Surgeon = Solves The Problem
- Cardiologist = Ensures That Team Got To The Heart Of The Problem – Operation Was Successful!

“SYMPTOMS”

ADDITION

-sum -total
-all -altogether
-in all -together

SUBTRACTION

-greater than -more than
-fewer than -less than
-How many more? -left
-How many less? -less

MULTIPLICATION

-product -times
-in all -all
-If each one costs \$5,
how much will 10 cost?

DIVISION

-quotient -per
-each -average
-divide equally
-If 10 cost \$50, how
much will 1 cost?

Ps. D.

Doctor of Problem Solving

Awarded To:

Name

Presenter

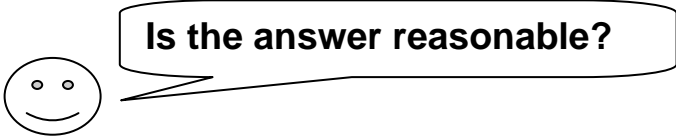
Date

TWO – STEP GRAPHIC ORGANIZER

1.

2.

Answer:

 **Is the answer reasonable?**

Name: _____

Date: _____

Model Drawing - Problem Solving Rubric	4	3	2	1
Reads the entire problem.				
Determines who or what problem is about.				
Draws the unit bar(s).				
Reads problem again, sentence by sentence, using needed information to label the unit bar(s) .				
Determines question and illustrates it on The unit bar.				
Computes and solves problem correctly.				
Writes answer in a complete sentence.				

4 – Completes step consistently at an independent level.

3 – Completes step mostly at an independent level.

2 – Needs assistance with step.

1 – Does not attempt nor seek assistance with step.

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