

Lesson 2: Numberless Word Problems (90 minutes)

Lesson Overview: In this lesson, students will continue to learn through numberless word problems. Students will then have to opportunity to independently practice on their own using real world problems from Yummy Math. This lesson will continue to scaffold learning so that the lessons will continue to build onto the next day's learning opportunities. Students will learn story problems through reading the actual problem and discussing the context before being given the numbers to solve the problem.

Resources/Materials:

- [Numberless word problem PPT](#)
- [student printout](#)
- pencils
- Khan Academy
- Yummy Math real world problem print out
- SuccessMaker
- projector
- computer

Performance Objective: Given three numberless word problems, students will solve with 100% accuracy in 3 out of 5 opportunities.

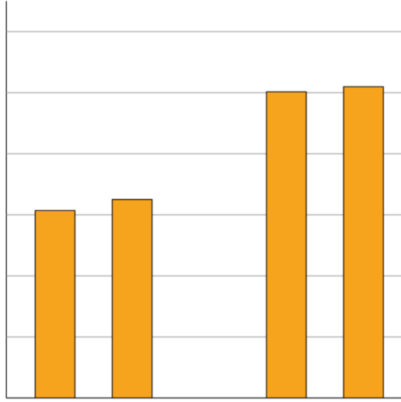
Whole Group Instruction: 15 minutes

Pre-Instructional Activities: Problem of the Day will be scaffolded into steps that start with the problem being presented without using numbers to connect literacy to the story problem.

Students will discuss strategies learned from Lesson Plan #1 when numberless word problems were introduced.

Content Presentation: [Numberless word problem PPT](#)

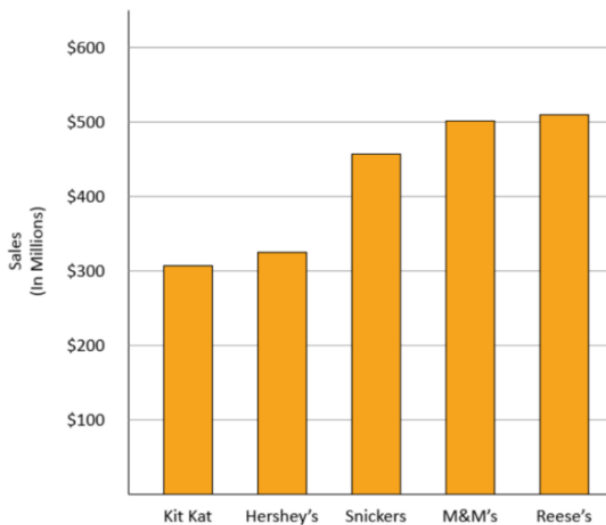
The teacher will present the problem:



The teacher will ask: What do you notice? What do you wonder?

After brief discussion, more information will be added to the graph, starting with candy bar names and then the data. Teacher will intermitted ask between information introductions: What new information was added to the graph? How does it change your thinking? We will use prediction and start to build what the story problem could be.

Trick or Treat!
America's Top Selling Candy in 2013



4.OA.3 Unit Lesson 2

Teacher will ask: how many dollars in sales do you think each bar represents? How did you decide?



Source: <http://247wallst.com/special-report/2013/10/16/americas-favorite-halloween-candy/3/>

Teacher will ask: How do the actual numbers compare to your estimates?

Then the problem will be presented:



How much greater were the sales for Reese's than Kit Kats?

Source: <http://247wallst.com/special-report/2013/10/16/americas-favorite-halloween-candy/3/>

Step 3: Learner Participation: Students will break into mixed ability small groups to solve task cards with numberless word problems. Students will turn in work for grading. The teacher will circulate between the 4 groups to answer questions and redirect learning when needed. Positive reinforcement of concepts will be used and constructive criticism when needed.

Independent Practice: 15 minutes

Students will practice solving 4.OA.3 problems that were gotten from Yummy Math. Students will be given ample time to solve the word problem on their own. Teacher will monitor work by rotating around the room. As students finish the problem will be reviewed by teacher with feedback. Students will rework the problem as needed. After everyone is done the whole group will share strategies.

Small Groups: 60 minutes (4 groups will rotate every 15 minutes, every students will rotate to use the 4 stations)

Technology: SuccessMaker for progress monitoring

Independent Practice: Khan Academy Multistep Word Problems Practice

Partner Practice: (Partner Reading) Marilyn Burns “One Riddle, One Answer”

Teacher Table/Formative Assessment:

Students will be given three multi-step word problems to solve.

Teacher will grade as we go, students enjoy the instant feedback especially when we use the thumbs up stamp to mark the problems are correct.

Given three numberless word problems, students will solve with 100% accuracy in 3 out of 5 opportunities.

4.OA.3 Unit Lesson 2

Solve each problem below. Clarify what you know, and what you need to know to solve the question being asked. Solve the first step to get the rest of the information you need. Use that information to solve the second step that gives you the final answer. Check and make sure your answer is reasonable.

Ashleigh runs 2 miles on Monday and three times that many on Tuesday. If she wants to run a total of 20 miles this week, how many more miles does she need to run?

Step One: _____ Step Two: _____

Step Three: _____

She needs to run _____ more miles. Since the problem tells two amounts of miles that she has already run, the amount she has left to run should be less than the number of miles she set as her goal for the week. Is your answer reasonable?

Dawn has 21 candies that she wants to make into parcels of 3. She wants to give these parcels to 5 of her friends. How many parcels will she have left over?

Step One: _____

Step Three: _____

She will have _____ parcels left over. Since she is dividing the total number of candies, the number of groups or parcels should be less than the total. Also, the number of parcels left over should be less than the total number of parcels. Is your answer reasonable?

John earned \$12 on Saturday but he only managed to earn half that amount on Sunday. He earned \$26 the previous weekend. How much more does he need to earn to give him the \$60 he needs to buy a new hockey stick?

Step One: _____ Step Two: _____

Step Three: _____

He needs \$ _____ more. Since the problem tells of three amounts of money that he has already earned, the amount still required should be less than the total amount required. Is your answer reasonable?