



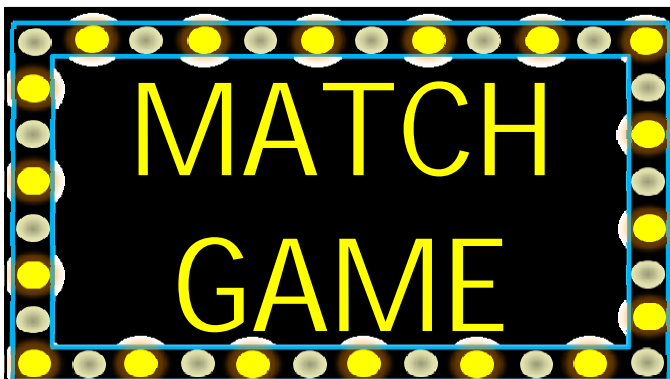


What You Will Do:

- Learn how to avoid common mistakes when writing word problems
- Learn the important pieces of a word problem
- Create a setting bank for word problems
- Learn how to help students decode and solve word problems



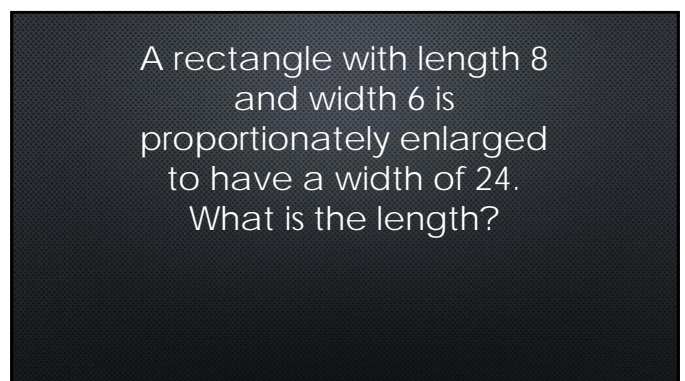
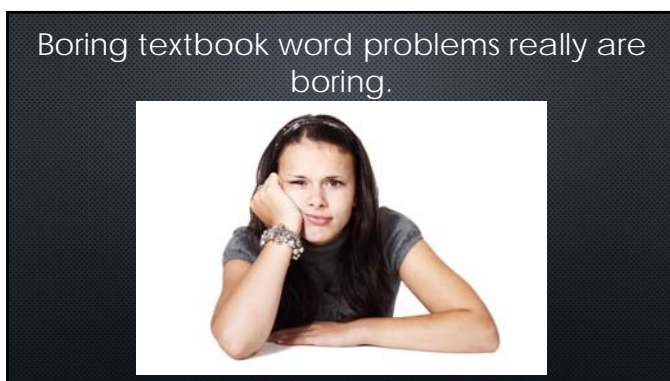
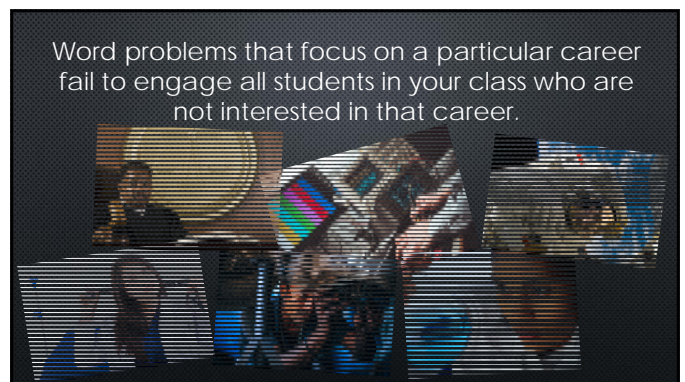
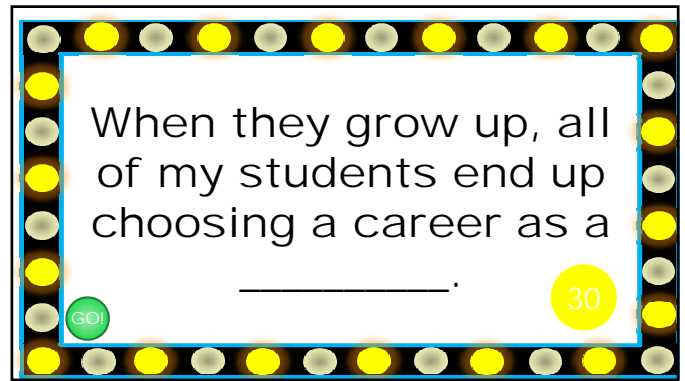
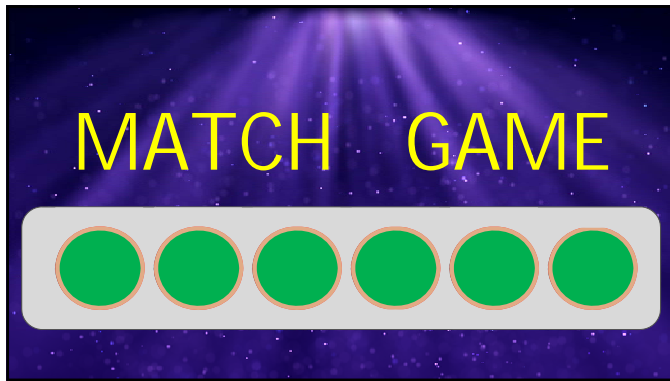
Avoiding the most common mistakes when creating a word problem.



Bald Bob complained,
"My wife thinks my
head is an egg. This
morning, she tried to
_____ it."

GO!

20



Mr. Robertson wants to enlarge a 4-inch long by 6-inch wide photograph of himself into a 64-inch wide poster.



What is the length of the poster?



Using "Adult" themes is not only unengaging but also confusing to students.

Jim buys a house for \$200,000. His down payment is \$25,000. His realtor's fee is 4% of the price of the house, which must be paid at closing. How much money must Jim bring to closing, and how much more will he owe on the house?

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Important Elements of a Good Story:

Conflict
Characters
Action
Setting

Conflict

Whatever you are asking students to find in a math problem probably causes more than enough conflict.

Characters

Look around your school.
Use students *and* teachers.
Use celebrities that everyone knows.

Action

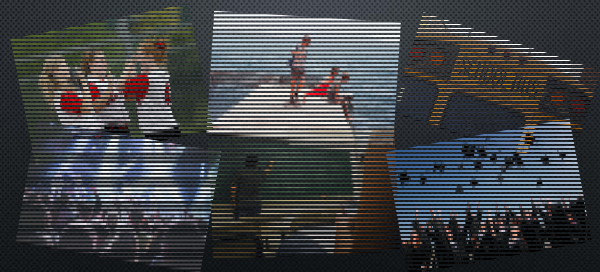
What is happening in this scene
(or, in our case, story problem)

Setting

The surroundings where
an event takes place



Teen Setting Brainstorm



Teen Setting Brainstorm

What does almost *everyone* at your school have in common?

- Places
- Events
- Situations

2:00

ADVANCED Brainstorm

What are some unrealistic, ridiculous situations?

- Sci-Fi
- Rich & Famous
- Superhero Powers

BE CREATIVE!!!

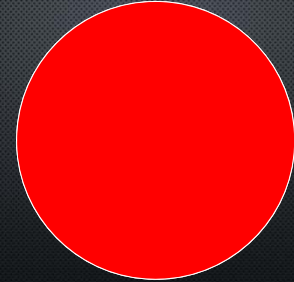


1:30

SHARING TIME



3 minutes

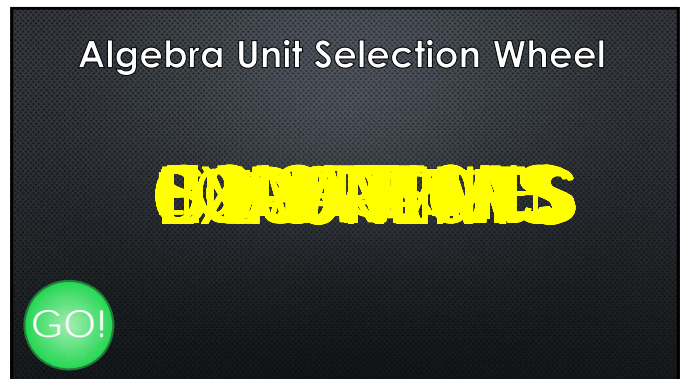
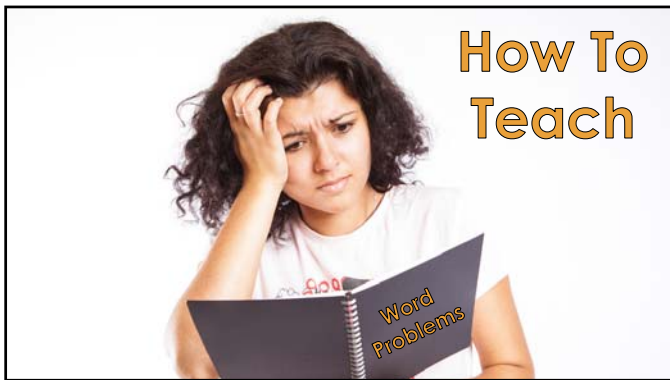


**YOUR
IDEAS**



The
**Dating
Game**





Substitution Elimination

$$y = \# x + \# \quad \#x + \#y = \#$$

$$\#x + \#y = \# \quad \#x + \#y = \#$$

"more/less than"
"twice/half as many"
"# times as many"

Contains two totals

Give students an organizational tool to help them be successful

ELIMINATION

	What ? Is looking for	What ? Is looking for	Total
Label for Total			
Label for Total			

WRITE YOUR OWN ELIMINATION PROBLEM



You go on a first date with Adam Levine, and the two of you eat eight Sliders and three onion rings for just \$7.85. For your one-week anniversary, you return to the same place and buy twelve Sliders and four onion rings for \$11.20. How much does each item cost?



REMEMBER:

- DO NOT FOCUS ON A CAREER
- DO NOT USE UNNECESSARILY DIFFICULT OR "ADULT" LANGUAGE
- BE SENSITIVE TO ENGLISH LANGUAGE LEARNERS
- BE CREATIVE
- CHARACTERS: STUDENTS/TEACHERS/CELEB'S
- USE THE SETTING THAT WE CHOSE

2:00

ELIMINATION PROBLEM

			Total

			Total

Give students an organizational tool to help them be successful

SUBSTITUTION

“Draw Stacks” Method

“Draw Stacks” Method



Bubba is 11 years older than Cletus. Together, they have been alive for 163 years. How old is each person?

WRITE YOUR OWN
SUBSTITUTION PROBLEM



Mr. Robertson & Mrs. McNulty have an extensive set of their favorite music on their flip phones. Together, they own 129 songs. Mr. Robertson has 23 more songs than Mrs. McNulty. How many songs does each person have ?



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- BE SENSITIVE TO ENGLISH LANGUAGE LEARNERS
- BE CREATIVE
- CHARACTERS: STUDENTS / TEACHERS
- USE THE TOPIC THAT WE CHOSE

2:00

SUBSTITUTION PROBLEM



Writing
Word
Problems



- DO NOT FOCUS ON A CAREER
- DO NOT USE UNNECESSARILY DIFFICULT OR "ADULT" LANGUAGE
- BE SENSITIVE TO ENGLISH LANGUAGE LEARNERS
- BE CREATIVE
- CHARACTERS: USE STUDENTS &/OR TEACHERS
- USE YOUR SETTING BANK
- CONTINUE TO ADD TO YOUR SETTING BANK
- ❖ PLACES, SITUATIONS, & EVENTS THAT ALL OF YOUR STUDENTS HAVE IN COMMON
- ❖ SCI-FI, RICH & FAMOUS, SUPERHERO POWER, & OTHER WILD SETTINGS

How To Teach



- Give students a framework to solve all/most word problems
- Show students what problems have in common
- Ensure all students understand the situation in the problem
- Have students explain problem in their own words
- Point out key mathematical ideas & relationships



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