Help students unlock story problems with the Word Problems Mastery Series!

Advanced Multiplication & Division: Part C, Challenge Word Problems

This workbook, one of twelve, Common Core aligned workbooks, in the series, includes:

- 40 daily word problems

- An answer key

- A placement test

Designed for students needing extra support with word problems, the mastery series separates computational difficulty from word problem from word problem complexity.

Part C focuses on complex one-step, and some two-step, problems with all four operations.

3. About 5,000 emperor penguins are in a colony. In the winter, they each take turns standing on the outside where it is cold. If 500 penguins stand on the outside for four hours, how long will it be before all the animals in the colony have had to stand on the outside?

Draw a diagram:

Number sentence: _____

Answer: _____

Explain how you got your answer: _____

_____

_____

31. Sloths only go to the bathroom once a week. They climb down from their tree once a week to do their business. If a sloth lives for 14 years, how many times will it have gone to the bathroom in its life?

Draw a diagram:

Number sentence: _____

Answer: _____

Explain how you got your answer: _____

_____

_____

Every word problem includes:

- Space for students to show their work
- A number sentence box
- An answer line long enough for them to write their answers as compete sentences

10. Worker bees live on average 42 days. During those 42 days they fly about four miles. A mile is 5,280 feet. How many feet do worker bees fly in their life?

- Number sentence: So they go 4 miles. A mile is 5,280 feet so 4x,5280=17,120 feet
- Answer: They go 17,120 in their lives

11. Female sea lions weigh about 230 pounds. Male sea lions weigh about 800 pounds. Five male and seven female sea lions were sleeping on a beach. How much do the twelve animals weigh altogether?

- Number sentence: Each female is 230 pounds and there are 7 females so they females weigh 7x230=1,610 pounds and the five males weigh 5x800=4,000 pounds so together they weigh 1,610+4,000; 230x7 + 5x800
- Answer: The twelve animals weigh 5,610 pounds altogether

12. Scarlet macaws are often stolen from the jungles by poachers who sell them to animal smugglers for $200. The animal smugglers then bring them to the US where they are sold for up to $4,000. How much profit does an animal smuggler make on buying and selling 10 macaws?

- Number sentence: If the animal smuggler pays 200 for the bird and sells it for 4000, the smuggler makes 4000-200=3800 profit per bird so for 10 birds it would make 10x38000 or 38000; (4000-200)x10=38000
- Answer: The smuggler would make $38,000 profit on ten macaws

13. A Tyrannosaurus Rex could eat up to 500 pounds of meat in one bite. A Brontosaurus weighed 25 tons. A ton is 2,000 pounds. How many bites would it take a T. Rex to eat a Brontosaurus?

- Number sentence: A brontosaurus weighs 25 tons. A ton is 2000 pounds, so it weighs 25x2000=50,000 pounds. A T. Rex can eat 500 per bite so 500x?=50,000, 50,000/500=100. It would take 100 bites for a T. Rex to eat the other dinosaur: 25x2000/500
- Answer: It would take 500 bites to eat the bigger dinosaur—but the T. Rex couldn't fit that much in its stomach at once!

The easy-to-use answer key allows for fast scoring of student work...

1A. Jesus played soccer with Chris for 9 minutes. Then Jesus played soccer with Jayla for 9 more minutes. How long did Jesus play soccer for?

Number Sentence _____

Answer _____

1C. Mrs. Vanwinkle got nine crayfish. Three died. Then four more were born. How many does she have now?

Number Sentence _____

Answer _____

While the placement test, also available FREE, helps you know where to start a student in the mastery series!

Word Problem Strategy

This is a variation of Polya's UPSC strategy.

Understand the problem

Read the problem.

Underline the question.

Paraphrase the question.

What are you being asked to figure out?

How many steps do you need to do? One or more than one?

Make a plan

Circle the numbers that you need. Cross out the ones you don't

Estimate an answer. Is your final answer going to be bigger or smaller than the numbers in the problem?

Translate the words of the problem into a diagram or equation.

Do the math

Important Numbers

1 year = 365 days

1 month = 28/29, 30, or 31 days

1 week = 7 days

1 day = 24 hours

1 hour = 60 minutes

1 minute = 60 seconds

5,280 feet = 1 mile

3 feet = 1 yard

12 inches = 1 foot

In addition, each packet has a strategy reference sheet & a conversion table!