Two-Step Problems

Grades 2-3 · Word Problems unit, lesson 3 of 8 · Free lesson

In this pack: page 1 teacher guide · page 2 task cards (cut apart) · page 3 practice · page 4 answer key.

Common Core Standard: 3.OA.D.8

Solve two-step word problems using the four operations.

OVERVIEW

Every story in this lesson needs two calculations, and the first one answers a question nobody asked out loud. Pupils learn to name that hidden question, box its answer with its unit, and carry the boxed answer into step 2. Two classic errors are busted: stopping at the step 1 answer, and skipping the step that uses a number already in the story.

WHERE THIS GOES NEXT

- Lesson 4, Multi-Step Add and Subtract: pupils find a hidden first step first.
- Lesson 5, Multi-Step Multiply and Divide: pupils multiply or divide as step two.
- Lesson 6, Extra and Missing Information: pupils spot numbers to ignore or find.
- Lesson 7, Working Backwards and Checking: pupils undo a story from its answer.
- Lesson 8, Mixed Multi-Step Practice: pupils pick the strategy in test style stories.

MATERIALS

- The lesson slides and a document camera or board for boxing step 1 answers live
- Printed chain cards (page 2 of this worksheet), scissors and pencils
- The practice page (page 3) and mini whiteboards for rehearsing hidden questions

DIRECTIONS

1. Teach the slides first. In the warm-up, keep the total hidden until the class has named the hidden question.
2. Hand out the chain cards: pupils write the hidden question, solve step 1, then finish step 2.
3. Set the practice page: A works one full chain, B starts from the hidden question, C is the frame.
4. Mark from the answer key on page 4, then give the exit ticket. For one-step practice, pair this with the library's word problem lessons.

EVIDENCE OF LEARNING

Success looks like this: the pupil states the hidden question before calculating, boxes the step 1 answer with its unit, and checks the final answer against the real question.

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Task Cards: Cut Apart and Solve

Cut along the dashed lines. For each card, write the hidden question first, solve step 1 and box it, then finish step 2 and write the answer.

Card 1

Nina had 31 songs. She added 4 lists of 5.

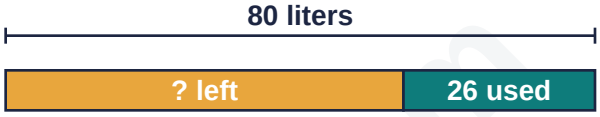


How many songs does Nina have in all?

_____ **Answer:** _____

Card 2

A tank held 80 liters. 26 liters were used.

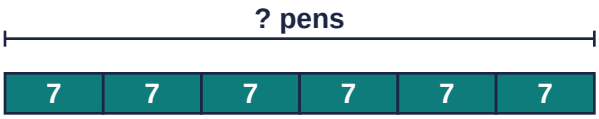


Then 15 liters were added. How many liters are in the tank now?

_____ **Answer:** _____

Card 3

Pens: 6 packs of 7 in each pack.



9 pens are given away. How many pens are left?

_____ **Answer:** _____

Card 4

Jae read 18 pages, then 25 pages more.

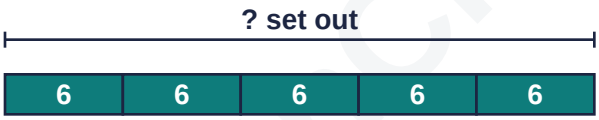


The book has 64 pages. How many pages has Jae not read yet?

_____ **Answer:** _____

Card 5

A hall has 45 chairs. 5 rows of 6 set out.

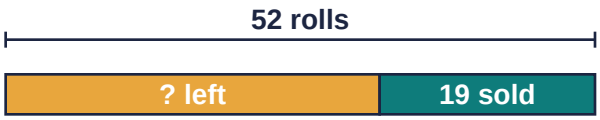


How many chairs are still stacked?

_____ **Answer:** _____

Card 6

A baker had 52 rolls and sold 19 rolls.



Then he baked 24 more rolls. How many rolls does he have now?

_____ **Answer:** _____

Card 7

A bead kit holds 90 beads in all.



Wren uses 38 beads, then 26 more. How many beads are left?

_____ **Answer:** _____

Card 8

Kip had 47 tokens. He won 3 per game, 8 games.



Then Kip spent 15 tokens. How many tokens does he have now?

_____ **Answer:** _____

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Two-Step Problems

Name: _____ Date: _____ Class: _____

Part A - One Story, Two Steps

The first bar is drawn for you. Finish step 1, then solve step 2.

A store had 118 shirts. It sold 46 shirts on Monday and 39 shirts on Tuesday.
How many shirts are left?



Step 1 answer: _____ shirts after Monday

Step 2 answer: _____ shirts are left

Part B - Write the Hidden Question First

Read the story. Write the hidden question, solve it, then finish the story.

A teacher has 6 boxes with 8 crayons in each box. 13 of the crayons are broken.
How many crayons are not broken?

Hidden question: _____

Step 1 answer: _____ crayons in all

Step 2 answer: _____ crayons are not broken

Part C - Say It First

Finish the frame for the crayon story in Part B.

Say it like a mathematician:
The hidden question is _____. First I _____. Then I _____, and that answers the real question.

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Answer Key - Two-Step Problems

Two-Step Chain Cards (page 2)

1. 51 songs in all (4 x 5 = 20 added, then 31 + 20 = 51).
2. 69 liters now (80 - 26 = 54, then 54 + 15 = 69).
3. 33 pens left (6 x 7 = 42, then 42 - 9 = 33).
4. 21 pages not read (18 + 25 = 43 read, then 64 - 43 = 21).
5. 15 chairs stacked (5 x 6 = 30 set out, then 45 - 30 = 15).
6. 57 rolls now (52 - 19 = 33, then 33 + 24 = 57).
7. 26 beads left (38 + 26 = 64 used, then 90 - 64 = 26).
8. 56 tokens (8 x 3 = 24 won, 47 + 24 = 71, then 71 - 15 = 56).

Part A - One Story, Two Steps

1. Step 1: 72 shirts after Monday (118 - 46 = 72).
2. Step 2: 33 shirts are left (72 - 39 = 33).

Part B - Write the Hidden Question First

1. Hidden question: how many crayons are there in all?
2. Step 1: 48 crayons (6 x 8 = 48). Step 2: 35 not broken (48 - 13 = 35).

Exit Ticket (from the slides)

1. Hidden question: seeds in the rows, 40. Total 57 seeds (40 + 17 = 57).
2. 61 books on the shelf (73 - 28 = 45, then 45 + 16 = 61).
3. 4 cookies each (24 - 4 = 20, then 20 shared by 5 = 4).

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