LESSON MAKER PRO

Number Part Puzzle

Build and break apart four-digit numbers.

GRADE 3 · 3.NOS.A.1.b

3.NOS.A.1.b "Compose and decompose whole numbers."

NAME _____ DATE _____

TRADE PLACE-VALUE PARTS

You can build a number by adding its thousands, hundreds, tens, and ones. You can also trade 1 thousand for 10 hundreds or 1 hundred for 10 tens without changing the number.

WORKED EXAMPLE

Break 6,483 into parts so it has 5 thousands instead of 6.

1. Start with 6,000 + 400 + 80 + 3.
2. Trade 1 thousand for 10 hundreds.
3. Now 6,000 + 400 becomes 5,000 + 1,400.

Answer: 6,483 = 5,000 + 1,400 + 80 + 3

PRACTICE 6 problems

1 Write 3,752 as a sum of thousands, hundreds, tens, and ones.

ANSWER _____

2 What number is 4,000 + 600 + 20 + 9?

ANSWER _____

3 Fill in the blank: 8,145 = 8,000 + ___ + 40 + 5.

ANSWER _____

4 What number has 5 thousands, 13 hundreds, 4 tens, and 2 ones?

ANSWER _____

5 Fill in the blank: 2,376 = 1,000 + ___ + 70 + 6.

ANSWER _____

6 Write each number, then tell which is greater: 4,000 + 15 hundreds + 6 ones; 5,000 + 4 hundreds + 9 tens + 6 ones.

ANSWER _____

APPLY IT Show your work

1 A game shop has 3 boxes of 1,000 trading cards, 14 packs of 100 cards, and 8 single cards. How many cards does it have?

WORK SPACE

ANSWER _____

2 At a school fair, a prize costs 5,360 tickets. Leo has 4 bundles of 1,000 tickets and 13 bundles of 100 tickets. How many more tickets does he need?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A number has 4 thousands, 13 hundreds, 12 tens, and 6 ones. Write the number. Then show it another way using thousands, hundreds, tens, and ones.

WORK SPACE AND ANSWER

ANSWER KEY

Number Part Puzzle

GRADE 3 · 3.NOS.A.1.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write 3,752 as a sum of thousands, hundreds, tens, and ones.	**3,000 + 700 + 50 + 2**
2	What number is 4,000 + 600 + 20 + 9?	**4,629**
3	Fill in the blank: 8,145 = 8,000 + ___ + 40 + 5.	**100**
4	What number has 5 thousands, 13 hundreds, 4 tens, and 2 ones?	**6,342**
5	Fill in the blank: 2,376 = 1,000 + ___ + 70 + 6.	**1,300**
6	Write each number, then tell which is greater: 4,000 + 15 hundreds + 6 ones; 5,000 + 4 hundreds + 9 tens + 6 ones.	**5,506 and 5,496; 5,506 is greater.**

PART 2 · APPLY IT

1. **4,408 cards** Add 3,000 + 1,400 + 8 to get 4,408.
2. **60 tickets** Leo has 4,000 + 1,300 = 5,300 tickets. He needs 5,360 - 5,300 = 60 more.

CHALLENGE

5,426; 5 thousands, 4 hundreds, 2 tens, and 6 ones.

Accept equivalent sums for problem 1. For the challenge, accept any correct second breakdown that differs from the one given.