LESSON MAKER PRO

Place Value Builders

Make three-digit numbers in more than one way.

GRADE 2 · MA.2.NSO.1.2

MA.2.NSO.1.2 "Compose and decompose three-digit numbers in multiple ways using hundreds, tens and ones. Demonstrate each composition or decomposition with objects, drawings and expressions or equations."

NAME _____ DATE _____

TRADE PLACE VALUES

A three-digit number has hundreds, tens, and ones. You can trade 1 hundred for 10 tens, or trade 1 ten for 10 ones, and the total stays the same.

WORKED EXAMPLE

A pet shop has 731 fish stickers. Show the number with hundreds, tens, and ones.

1. 731 has 7 hundreds, 3 tens, and 1 one.
2. Write 7 hundreds as 700, 3 tens as 30, and 1 one as 1.
3. Add the place values: 700 + 30 + 1 = 731.

Answer: 7 hundreds, 3 tens, 1 one; 700 + 30 + 1 = 731

PRACTICE 5 problems

1 Nia sorts 458 toy bricks. Write an equation that shows the hundreds, tens, and ones.

ANSWER _____

2 A pet shelter has 682 cans of food. Write an equation that shows the hundreds, tens, and ones.

ANSWER _____

3 A game score is 940 points. Write it as hundreds, tens, and ones.

ANSWER _____

4 Zoe has 563 beads. Write 563 using 4 hundreds. Then write the tens and ones.

ANSWER _____

5 A snack box has 720 crackers. Write two different equations that show hundreds, tens, and ones.

ANSWER _____

APPLY IT Show your work

1 Kai has 864 bookmarks. Write two different equations to show 864 using hundreds, tens, and ones.

WORK SPACE

ANSWER _____

2 Ava has 350 star stickers. She writes 3 hundreds + 5 tens + 0 ones. Trade 1 hundred for 10 tens. Write the new equation.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A robot club has 462 bolts. Milo says 462 can be 4 hundreds, 6 tens, and 2 ones. He also says it can be 3 hundreds, 16 tens, and 2 ones. Explain why both ways are correct.

WORK SPACE AND ANSWER

ANSWER KEY

Place Value Builders

GRADE 2 · MA.2.NSO.1.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Nia sorts 458 toy bricks. Write an equation that shows the hundreds, tens, and ones.	**400 + 50 + 8 = 458**
2	A pet shelter has 682 cans of food. Write an equation that shows the hundreds, tens, and ones.	**600 + 80 + 2 = 682**
3	A game score is 940 points. Write it as hundreds, tens, and ones.	**900 + 40 + 0 = 940**
4	Zoe has 563 beads. Write 563 using 4 hundreds. Then write the tens and ones.	**400 + 160 + 3 = 563**
5	A snack box has 720 crackers. Write two different equations that show hundreds, tens, and ones.	**700 + 20 + 0 = 720; 600 + 120 + 0 = 720**

PART 2 · APPLY IT

1. **800 + 60 + 4 = 864; 700 + 160 + 4 = 864** Write the usual hundreds, tens, and ones form. Then trade 1 hundred for 10 tens.
2. **200 + 150 + 0 = 350** After trading 1 hundred, Ava has 2 hundreds and 15 tens. The number is still 350.

CHALLENGE

Both ways are correct because 1 hundred is the same as 10 tens, so 4 hundreds and 6 tens can be traded for 3 hundreds and 16 tens.

Accept equivalent decompositions that total the stated number and use correct hundreds, tens, and ones values. For items that name a required number of hundreds, the answer must keep that number of hundreds.