

DECOMPOSING NUMBERS TO 100,000 – GRADE 3

PRACTICE

Eight practice questions on place value decomposition and expanded notation

Name: _____

Date: _____

Instructions

Students practice decomposing five-digit numbers up to 100,000 by writing numbers in expanded notation, filling in place value charts, composing numbers from parts, and identifying the value of digits. Show all work on the lines provided.

Decomposing Numbers to 100,000 – Grade 3 Practice

Directions: Read each question carefully. Show your work on the lines provided.

1. Write the number **45,237** in expanded notation.

2. Fill in the place value chart for the number **63,809**.

Ten Thousands	Thousands	Hundreds	Tens	Ones

3. What is the value of the digit **7** in the number **87,415**?

4. Compose the number. Write the standard form.

$$30,000 + 4,000 + 500 + 60 + 2 =$$

5. Decompose the number **91,084** into its place value parts.

6. Fill in the blanks to decompose **52,360**.

_____ ten thousands + _____ thousands + _____ hundreds + _____ tens +
_____ ones

7. Write the number **28,106** in expanded notation.

8. A number has 6 ten thousands, 0 thousands, 4 hundreds, 0 tens, and 3 ones.

What is the number in standard form?

What is the number in expanded notation?



Parent/Teacher Tip

Provide base-ten blocks or place value mats for students who need concrete manipulatives. Encourage students to say each place value aloud (e.g., "4 ten thousands, 5 thousands, 2 hundreds, 3 tens, and 7 ones") to reinforce vocabulary. For struggling learners, start with four-digit numbers before moving to five-digit numbers.

Answer Key – Teacher's Copy

1. $45,237 = 40,000 + 5,000 + 200 + 30 + 7$
2. Ten Thousands: 6; Thousands: 3; Hundreds: 8; Tens: 0; Ones: 9
3. The value of the 7 is 7,000 (7 thousands).
4. $30,000 + 4,000 + 500 + 60 + 2 = 34,562$
5. $91,084 = 90,000 + 1,000 + 0 + 80 + 4$ (or $90,000 + 1,000 + 80 + 4$)
6. 5 ten thousands + 2 thousands + 3 hundreds + 6 tens + 0 ones
7. $28,106 = 20,000 + 8,000 + 100 + 0 + 6$ (or $20,000 + 8,000 + 100 + 6$)
8. Standard form: 60,403; Expanded notation: $60,000 + 400 + 3$

Curriculum references for the teacher

These sources informed the content review. A reference does not mean every expectation is covered by this worksheet.

[Grade 3 – Mathematics – §111.5\(b\)\(1\).](#)

[Grade 3 – Mathematics – §111.5\(b\)\(4\).](#)

[Grade 3 – Mathematics – §111.5\(b\)\(6\).](#)