

Digit Value Detectives

Find what each digit is worth.

GRADE 2 • 2.NS.2.c

2.NS.2.c "Apply patterns within the base 10 system to determine and communicate, orally and in written form, the place (ones, tens, hundreds) and value of each digit in a three-digit whole number (e.g., in 352..."

NAME _____

DATE _____

PLACE MAKES VALUE

In a three-digit number, a digit's place tells its value. Digits can be in the hundreds, tens, or ones place.

WORKED EXAMPLE

A game shelf label says 461.
What does each digit represent?

1. The 4 is in the hundreds place, so it represents 400.
2. The 6 is in the tens place, so it represents 60.
3. The 1 is in the ones place, so it represents 1.

Answer: 4 hundreds = 400, 6 tens = 60, and 1 one = 1.

PRACTICE 5 problems

- 1** A toy bin has the number 238. What does the 3 represent?

ANSWER _____

- 2** A snack box has the number 574. What does the 5 represent?

ANSWER _____

- 3** A pet tag has the number 692. What does the 2 represent?

ANSWER _____

- 4** A book basket has the number 817. What does the 1 represent?

ANSWER _____

- 5** A puzzle box has the number 345. What does each digit represent?

ANSWER _____

APPLY IT Show your work

- 1** Lena has a sticker book labeled 426. She points to the 2. What place is the 2 in, and what is its value?

WORK SPACE

ANSWER _____

- 2** A fish food box is labeled 735. What does the 7 represent?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A robot game score has 6 hundreds, 0 tens, and 9 ones. Write the score. What is the value of the 0?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A toy bin has the number 238. What does the 3 represent?	3 tens, or 30
2	A snack box has the number 574. What does the 5 represent?	5 hundreds, or 500
3	A pet tag has the number 692. What does the 2 represent?	2 ones, or 2
4	A book basket has the number 817. What does the 1 represent?	1 ten, or 10
5	A puzzle box has the number 345. What does each digit represent?	3 hundreds = 300, 4 tens = 40, and 5 ones = 5

PART 2 • APPLY IT

1. **The 2 is in the tens place. Its value is 20.** In 426, 2 is the middle digit. The middle digit is in the tens place, so it represents 2 tens, or 20.
2. **7 hundreds, or 700** In 735, 7 is the first digit. The first digit is in the hundreds place, so it represents 700.

CHALLENGE

609. The 0 is in the tens place, and its value is 0.

Accept answers that name both the place and value, such as "3 tens" and "30." For the challenge, accept "0 tens" for the value of the 0 if the student also writes 609.