

CRACKING THE MYSTERY DECIMAL CLUE BY CLUE

- 1 Read clue 1: a decimal with two places and tenths digit 4 so list 0.40 to 0.49 on the mat.
- 2 Apply clue 2 to cross off numbers that do not match the new rule.
- 3 Continue with each clue until only one number remains.

WARM-UP

Draw a place-value mat and mark the candidate scores.

U	t	h	th

1. Write 0.4 in the mat
2. Write 0.42 in the mat
3. Write 0.47 in the mat

PRACTICE

- 1 In the card game the mystery score clue is: I have three tenths and no hundredths. What could the score be?
- 2 During the board game the first clue for the mystery points is: I am a decimal with two places. My tenths digit is **6**. List possible scores.
- 3 The dice game mystery total has two clues: I have three tenths and no hundredths. I am bigger than **0.3** but smaller than **0.31**. What number fits?
- 4 In the video game the score clues are: tenths digit **4**, hundredths digit **2**, thousandths digit **5**. Find the exact score.
- 5 The puzzle game gives four clues about a score with two decimal places: the tenths digit is **6**, the hundredths digit is odd, and the score is greater than **0.67**. What is the mystery score?

? ALWAYS, SOMETIMES, NEVER

Always, sometimes or never true? Write A, S or N.

- a. A clue naming the tenths digit rules out numbers with a different tenths digit. ☐
- b. Three place-value clues leave more than one possible number. ☐
- c. The clue 'the thousandths digit is 4' tells you the tenths digit. ☐
- d. Two place-value clues identify the exact mystery number. ☐

REFLECT

Which is trickier to compare — large whole numbers or decimals? Why?