learning focus:
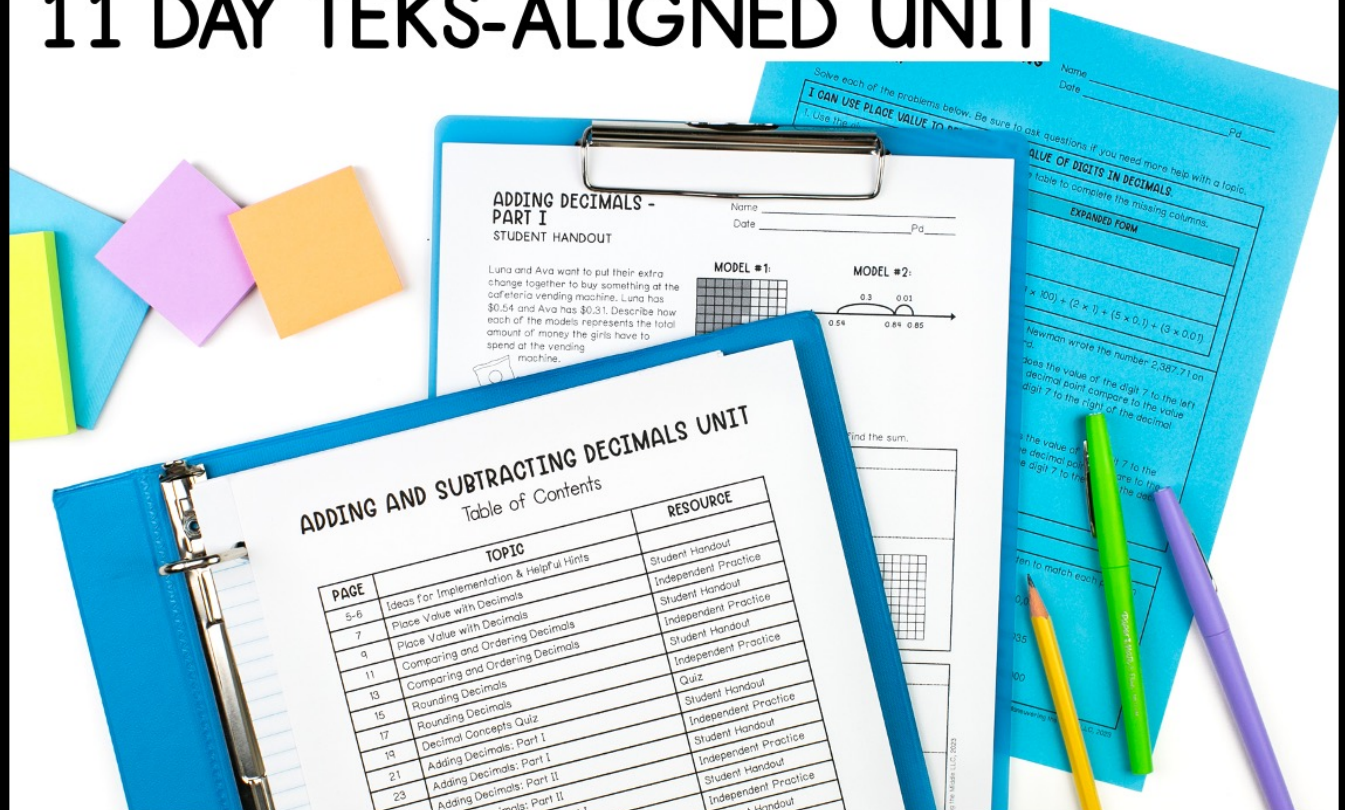
✓ compare and round decimals to the thousandths

✓ add and subtract decimals using models and the standard algorithm in mathematical and real-world situations

✓ multiply and divide by powers of ten

ADDING AND SUBTRACTING DECIMALS UNIT
11 DAY TEKS-ALIGNED UNIT

5th GRADE

ADDING AND SUBTRACTING DECIMALS

ready-to-go, scaffolded student materials

ADDING AND SUBTRACTING DECIMALS UNIT
Table of Contents

ADDING AND SUBTRACTING DECIMALS

5th GRADE

a 11 day TEKS-aligned unit
TEKS: 5.2A, 5.2B, 5.2C, 5.3A, 5.3K

student friendly + real-world application

scaffolded concepts

ADDING DECIMALS - PART I

STUDENT HANDOUT

Name _____
Date _____ Pd _____

Luna and Ava want to put their extra change together to buy something at the cafeteria vending machine. Luna has $0.54 and Ava has $0.31. Describe how each of the models represents the total amount of money the girls have to spend at the vending machine.

MODEL #1:

MODEL #2:

0.3   0.01

0.54   0.84 0.85

In 1-4, estimate the sum and explain your reasoning. Then use the models to find the sum.

1.	0.58 + 0.73	2.	1.15 + 0.37
ESTIMATE:		ESTIMATE:	
MODEL:		MODEL:	

3.	6.17 + 1.62	4.	14.76 + 10.44
ESTIMATE:		ESTIMATE:	
MODEL AND SOLVE:		MODEL AND SOLVE:	

ADDING DECIMALS - PART II

INDEPENDENT PRACTICE

Name _____
Date _____ Pd _____

Solve the problem on card A. Draw a line from the arrow on card A to its solution in the corner of a card in column #2. Then solve the corresponding problem. Continue showing the path from each card to its solution in the opposite column until you end at the solution on card A.

A — 291.58

38.72 + 77.4 →

B — 130.595

Mrs. Baker had a container filled with 212.316 ounces of flour. She poured a 79.264-ounce bag of flour into the container. How many ounces of flour are in the container?

C — 275.71

Caroline filled a large glass pitcher with 34.82 ounces of lemonade and 87.9 ounces of tea. How many ounces of liquid are in the glass pitcher?

D — 116.12

149.5 + 108.718

E — 286.48

89.92 + 40.675

F — 122.72

Mr. Halsted's utility bill was $208.56 in June. His utility bill in July was $77.92 more than it was in June. How much was Mr. Halsted's utility bill in July?

G — 258.218

Aaron's cell phone apps are using 72.15 GB of storage space. His photos are using 48.79 more GB of storage space than the apps. How many GB of storage space are Aaron's photos using?

H — 120.94

78.35 + 197.36

COLUMN #1

COLUMN #2

self-checking practice

ADDING AND SUBTRACTING DECIMALS

5th GRADE

a 11 day TEKS-aligned unit
TEKS: 5.2A, 5.2B, 5.2C, 5.3A, 5.3K

unit study guide + assessments

✓ quizzes

✓ editable unit test

DECIMAL CONCEPTS
QUIZ

Name _____
Date _____ Pd _____

Answer the questions below. Be sure to show your work.

Answers
1. _____
2. _____
3. _____

1. Four students wrote a number on a card. Which student(s) wrote a number that would round to 12.8 when rounded to the nearest tenth?

MYA 12.809   **JUAN** 12.079   **BEN**   **ALICIA**

2. Which of the following comparisons is

a. 7.115 > 7.203
b. 8.32 > 8.279
c. 6.02 = 6.020
d. 5.005 < 5.05

Answer the questions below. Be sure to

3. Write the numeral represented by (6 ×

4. Four students competed in a race dur shows the number of seconds it took ea around the track. In what position would times were ordered from least to greate

a. First
b. Second
c. Third
d. Fourth

5. Spencer purchased an airline ticket f eight cents. How is this number written

a. (3 × 1,000) + (2 × 10) + (7 × 1) + (4 ×
b. (3 × 1,000) + (2 × 100) + (7 × 1) + (4 ×
c. (3 × 1,000) + (2 × 100) + (7 × 10) + (4
d. (3 × 1,000) + (2 × 100) + (7 × 1) + (4 ×

ADDING AND SUBTRACTING DECIMALS
UNIT REVIEW

Name _____
Date _____ Pd _____

Solve each of the problems below. Be sure to ask questions if you need more help with a topic.

I CAN USE PLACE VALUE TO REPRESENT THE VALUE OF DIGITS IN DECIMALS.

1. Use the given representation in each row of the table to complete the missing columns.

NUMBER	WORDS	
	two hundred and forty-six thousandths	
15.07		

2. Circle the name of the student wh correct representation of the numbe Then, rewrite the other representati correctly.

BRITTON 3 + 0.9 + 0.02   **MOL** three ninety thousa

I CAN MULTIPLY AND DIVIDE WITH

4. Apply your understanding of multi on the left with its solution on the rig

_____ i. 0.035 × 10³
_____ ii. 335,000 ÷ 10²
_____ iii. 3,350 × 10⁴

PLACE VALUE WITH DECIMALS
STUDENT HANDOUT

Name **Answer Key** _____
Date _____ Pd _____

Sasha is going to buy a chair for her office and plans to pay using cash. Sasha owes the seller $343 for the chair and will pay with hundreds, tens and ones.

a. Using the least amount of bills as possible, list the number of each bill Sasha will need.
   Sasha will need 3 $100 bills, 2 $20 bills, and 3 $1 bills.

b. Represent the cost of the chair using expanded notation. How do the 3s in the cost differ?
   (3 × 100) + (4 × 10) + (3 × 1)
   The first 3 represents 3 hundreds and the second 3 represents 3 ones.

Place value describes the numerical value that a digit has based on its _**position/placement**_.

Use the chart at the right to consider the value of digits to both the left and the right of the decimal by filling in the numerical value of each position.

THOUSANDS	HUNDREDS	TENS	ONES	.	TENTHS	HUNDREDTHS	THOUSANDTHS
1,000	100	10	1	.	0.1	0.01	0.001
1,000	100	10	1	.	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1,000}$

Observe how the value in the ones place compares to the tens place. Next, compare the tens place to the hundreds place. Then summarize the patterns to complete the sentences below:

a. The value of any digit is 10 times greater than the value of the digit to its _**right**_.

b. The value of any digit is $\frac{1}{10}$ the value of the digit to its _**left**_.

In 1-3, apply your understanding of place value to write each number using expanded notation.

NUMBER	EXPANDED FORM
1 96.02	(9 × 10) + (6 × 1) + (2 × 0.01)
2 1,362.75	(1 × 1,000) + (3 × 100) + (6 × 10) + (2 × 1) + (7 × 0.1) + (5 × 0.01)
3 3.804	(3 × 1) + (8 × 0.1) + (4 × 0.001)

answer keys included

©Maneuvering the Middle LLC, 2023

A MANEUVERING THE MIDDLE® RESOURCE