

These pages will get updated to represent TEKS Process Standards, which are very different in content from the SMPs.

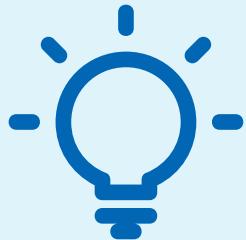
Mathematical Practice

Use this chart to help you apply the Mathematical Practices when solving problems.

Mathematical Practice

1

Make sense of problems and persevere in solving them.



TEKS 4.2.A

PS 3, 6, 7

What to Ask and Think About

Ask:

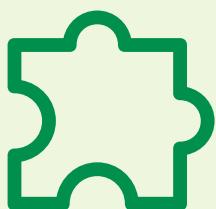
- What is the problem about?
- What plan can I make to solve the problem?
- How do I know that my answer makes sense?

Think:

- If I don't know how to solve the problem, I can _____.
- I can solve the problem in a different way by _____.

2

Reason abstractly and quantitatively.



TEKS 4.2.A

PS 3, 6, 7

Ask:

- What are some different ways that I can express the problem?
- What do the numbers in the problem represent?
- What can I write or draw to describe the problem?

Think:

- The symbols in the problem show _____.
- The steps in my solution make sense because _____.

Book 1 Contents

New



Module 1 Multi-Digit Numbers 2

High-level summary TK: Em corumquat volessitio. Ed eatin
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Prerequisite Check 6

1.1 Understand Place-Value Relationships 7

TEKS 4.2.A PS 3, 6, 7

TEKS 4.1.A: Prior Learning Connection New

1.2 Read and Write Numbers 15

TEKS 4.2.A PS 3, 6, 7

TEKS 4.1.A: Prior Learning Connection

1.3 Regroup and Rename Numbers 21

TEKS 4.2.A PS 3, 6, 7

TEKS 4.1.A: Prior Learning Connection

1.4 Compare and Order Numbers 27

TEKS 4.2.A PS 3, 6, 7

TEKS 4.1.A: Prior Learning Connection

1.5 Use Place-Value Understanding to Round Numbers 33

TEKS 4.2.A PS 3, 6, 7

TEKS 4.1.A: Prior Learning Connection

1.6 Add Whole Numbers and Assess Reasonableness 39

TEKS 4.2.A PS 3, 6, 7

TEKS 4.1.A: Prior Learning Connection

1.7 Subtract Whole Numbers and Assess Reasonableness 45

TEKS 4.2.A PS 3, 6, 7

TEKS 4.1.A: Prior Learning Connection

1.8 PROBLEM SOLVING New

Use Addition and Subtraction to Solve Comparison Problems 51

TEKS 4.2.A PS 3, 6, 7

TEKS 4.1.A: Prior Learning Connection

Module Review 57



In Grade 3, you learned how to ...

- represent data in picture graphs, scaled bar graphs, and line plots.
- use picture graphs, bar graphs, and line plots to solve problems.
- measure lengths to the nearest quarter inch.

Now, let's get ready for Module 1!

New Texas shape

Multi-Digit Numbers

In this module, you will learn how to ...

- use place value to represent numbers flexibly.
- add and subtract multi-digit numbers with regrouping.
- determine the reasonableness of sums and differences.



New



Multi-Digit Numbers

Name _____

New



4.2.A

Lesson 1.1

PROBLEM SOLVING

New on some lessons

Understand Place-Value Relationships

Learning Goal

I can use a place-value chart to compare the values of different digits and justify the comparisons.

Rate yourself on this learning goal:

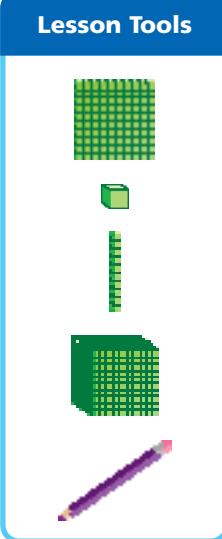
- I don't understand. I need more practice. I've got it.



Spark Your Learning

Some museums keep collections of insect specimens as a historical record. Experts keep track of inventory, inspect specimen cases for damage, and check that labels are set correctly. How can you show the number of beetles in the museum insect inventory?

Show your thinking.



Museum Insect Inventory

Insect	Number
beetles	1,240
wasps	19,725
butterflies	11,100

Turn
& Talk

Can you show the number of beetles in a different way? How do the different ways compare?

Task 1**PROBLEM SOLVING**

New on some tasks

- PS** **Con** New **Arguments:** The museum has 11,100 butterfly specimens. Describe the relationship between the values of the digits in the thousands place and hundreds place.

Represent and describe ten thousands, thousands, hundreds, tens, and ones.



Blue Mountain
Swallowtail butterfly

- A. Justify:** Why did you use each representation? New

- B. What do you notice about the size of each representation?

- C. Describe the relationship between the values of the digits in the thousands place and hundreds place in 11,100.

New

Name _____

Task 2

- PS** **Attend to Precision:** As many as 136,080 lady beetles were used as an alternative to pesticides in the community garden. This means no harsh chemicals were used to grow the food! What is the value of each digit in the number 136,080?

- A. Enter the digits for 136,080 in the top row of the place-value chart.

PERIOD			PERIOD			PERIOD		
MILLIONS			THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
			1 hundred thousand	ten thousands		hundreds		
					30,000			80

- B. What is the place-value position of the digit 6?

- A Ones C Thousands
 B Hundreds D Ten Thousands

- C. How can you find the value of the digit 1?

- D. Show Another Way:** Enter other ways to find the value of the digits in the place-value chart.

- E. What do you notice about the value of each place in the place-value chart?

New

Vocabulary

Place value describes the value of a digit in a number. A place-value chart can help you understand the place-value position. Each group of three digits in a multi-digit number, separated by commas or spaces, is called a **period**. Each period has hundreds, tens, and ones.

Task 1

New Problem Solving

PROBLEM SOLVING

 **Use a Problem-Solving Model:** Makani is making kites in the shape of a parallelogram. He wants to make 10 kites. Makani is trying to figure out how much fabric he needs to construct the kites. Each parallelogram has a height of 2.5 feet and a base of 3 feet.

[NEW Photo or Art:
Parallelogram shaped kite]

A.  Analyze: What information do you have? What are you trying to figure out?

B.  Plan: Plan How can you use the information you have to solve this problem?

C.  Solve: Use your plan to solve this problem. Show your work.

D.  Justify: Explain why your answer in Part C makes sense.

E.  Evaluate Process: How effective was your strategy to solve this problem? What might you do differently.



Turn & Talk
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent justo arcu, aliquet consectetur adipiscing elit?

Task 2 continued

- A. ELPS** Needs an ELPS question/interaction for students. TK To et volupta ssequatibus sunt estrum nis.



How can you use the place-value chart to compare the values of the digits 3 and 6?

New

Connect to Prior Learning

Task 3**PROBLEM SOLVING**

- PS** **Use Structure:** Yellow jacket wasps live in colonies that can contain up to 15,000 wasps, while bee colonies can have as many as 50,000 bees. How does the value of the digit 5 in 50,000 compare with the value of the digit 5 in 15,000?



Use the place-value chart to compare.

- A.** Show 15,000. The value of the digit 5 is _____.

THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones

- B.** Show 50,000. The value of the digit 5 is _____.

THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones

- C.** Which digit 5 has the greater value? The digit 5 in _____.

- D.** The value of the digit 5 in 50,000 is _____ times the value of the digit 5 in 15,000.

Review Spark Your Learning

How does a place-value chart help you solve the problem?



What is another way you can compare the digits without using a place-value chart?

Name _____

Quick Check

- 1** What is the value of the digit 9 in the number 396,002?

The value of the digit 9 is _____.

- 2** How does the value of the digit 4 in 274,513 compare to the value of the digit 4 in 47,329? _____

The digit 4 in _____ has the greater value.

- 3** There are over 2,000 different species of jellyfish. The largest species have tentacles 200 feet long. How does the value of the digit 2 in 2,000 compare with the value of the digit 2 in 200?

The value of the digit 2 in 2,000 is _____ times the value of the digit 2 in 200.

Learning Goal

I can use a place-value chart to compare the values of different digits and justify the comparisons.

Rate yourself on this learning goal:

- I don't understand. I need more practice. I've got it.

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Pause for your next steps.

Practice on Your Own

New

Name _____

- 1** In 2009, experts were called to a Baltimore wastewater treatment plant to remove orb weaving spider webbing. In the web samples that were removed, there were 31,194 spiders. Show the value of the digit 3 in two different ways.

- 2**  **Use Structure:** The praying mantis collection at a museum includes 13,000 specimens, while another museum has a collection of 300 specimens. How many times as great is the value of the digit 3 in 13,000 than the value of the digit 3 in 300?

_____ times as great

- 3** A beekeeper studies a colony of honeybees that has one queen bee, about 250 male drones, and about 37,250 female worker bees. Show the value of the digit 7 in 37,250 in two different ways.

New page treatment

- 4** One day, a cricket chirps 115,200 times. The next day it chirps 11,020 times. How many times as great is the value of the digit 2 in 115,200 than the value of the digit 2 in 11,020? How do you know?

Complete the sentence.

The value of the digit 2 in 115,200 is _____ times as great as the value of the digit 2 in 11,020 because the digit 2 in _____ is one place to the right of the digit 2 in _____.

-  **Attend to Precision:** Compare the values of the underlined digits. Then complete the sentence.

- 5** 26,451 and 2,385

The value of the digit 2 in the number _____ is _____ times the value of the digit 2 in the number _____.

- 6** 3,000 and 30,000

The value of the digit 3 in the number _____ is _____ times the value of the digit 3 in the number _____.

Name _____

Module Review

Vocabulary

Use vocabulary words to complete the sentences.

Vocabulary

addend
estimate
period
standard form
word form

- 1** The _____ of a number uses the digits 0–9, with each digit having a place value.

- 2** Three hundred sixty-two is an example of the _____ of a number.

- 3** A(n) _____ is a number that is close to the exact amount.

- 4** A number that is added to another number is called a(n) _____.

- 7**  **PS** **Attend to Precision:** Enter the digits for 23,518 in the top row of the place-value chart. Then complete the chart to find the value of each digit.

THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
		3 thousands			

		500			
--	--	-----	--	--	--

Give the digit in its place-value position.

8 5,619

- _____ thousands
_____ hundreds
_____ tens
_____ ones

9 605,981

- _____ hundred thousands
_____ ten thousands
_____ thousands
_____ hundreds
_____ tens
_____ ones

New page treatment

Practice on Your Own

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Did the other colors to show them

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Name _____

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Practice on Your Own

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- 2 Three hundred sixty-two is an example of the _____ of a number.
- 3 A(n) _____ is a number that is close to the exact amount.
- 4 A number that is added to another number is called a(n)
_____.

Vocabulary

addend
estimate
period
standard form
word form

Concepts and Skills

- 5 **Use Structure:** Select all the ways to regroup and rename 4,200.
 A 42 hundreds C 4,200 ones E 420 ones
 B 42 thousands D 420 tens F 420 thousands
- 6 The value of the digit 2 in 321,705 is _____ times the value of the digit 2 in 32,571.
Which is the correct value that completes the sentence?
 A 10 B 100 C 1,000 D 10,000

Name _____

- 7** What is $200,000 + 80,000 + 500 + 70 + 1$ written in standard form?

- 8** In the United States, about 620,000 dogs that enter animal shelters as strays are returned to their owners. Which numbers round to 620,000 when rounded to the nearest ten thousand?

Select all that apply.

- A 619,000
- D 625,000
- B 605,000
- E 614,000
- C 621,000

- 9** Which comparisons are true?

Select all that apply.

- A $37,940 > 37,939$
- D $801,269 > 801,296$
- B $473,248 = 473,248$
- E $37,340 < 37,890$
- C $16,105 = 16,103$

- 10** Which shows the numbers ordered correctly from least to greatest?

Select all that apply.

- A 32,245; 32,452; 32,425
- D 216,135; 261,532; 216,153
- B 304,561; 305,561; 306,561
- E 86,109; 96,869; 169,715
- C 817,902; 871,029; 871,092

- 11a** Estimate the sum to the nearest hundred thousand.

$$\begin{array}{r} 480,321 \\ + 341,569 \\ \hline \end{array}$$

- 11b** Determine the sum.

$$\begin{array}{r} 480,321 \\ + 341,569 \\ \hline \end{array}$$

- 12a** Estimate the difference to the nearest ten thousand.

$$\begin{array}{r} 68,652 \\ - 16,867 \\ \hline \end{array}$$

- 12b** Determine the difference.

$$\begin{array}{r} 68,652 \\ - 16,867 \\ \hline \end{array}$$

- 13** The library collected 2,532 books on Friday. The library collected 1,286 more books on Saturday than on Friday. How many books were collected on Saturday?

_____ books

addend

New

**SAY IT**

ad•dend

noun

Module 1

estimate**SAY IT**

es•ti•mate

noun

It takes 8 minutes to bike to school.
A good estimate is that it takes
about 10 minutes to bike to school.

New

Module 1