STEMscopes TEXAS MATH
POWERED BY ACCELERATE LEARNING

Grade 3

Lesson Sample

Content Review

Built for Texas Math

Table of Contents

A Math Program for Texas Educators

GUIDED LESSON TOUR

Welcome to Your Lesson Sample

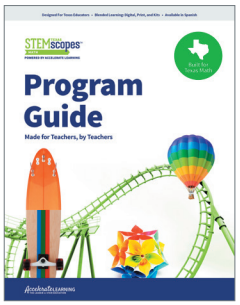
The following pages feature resources that mirror what teachers and students can access digitally. Each section includes clear navigation steps that seamlessly guide you through the content online, ensuring quick and easy access. Look for red circle callouts in the top left corner, which correspond directly to the titles of online documents.

Our lessons are also referred to as Scopes online. Scopes are built on a solid foundation of proven educational strategies, featuring a wealth of resources and materials fully aligned to the TEKS.

From our online platform, you can:

- Personalize your experience by bookmarking your favorite elements, crafting lesson plans, and effortlessly managing your students and classes.
- Access detailed preparation instructions, facilitation prompts, discussion questions, and sample student answers, providing everything you need for successful hands-on learning.
- Preview assignments from the student's view.
- Assign activities and assignments to students digitally, grade submissions, and provide feedback seamlessly within our user-friendly interface.
- Download and print files for added flexibility!

Explore the STEMscopes Texas Math Program Guide for a deeper dive into our lesson design and comprehensive program details.



Log In and Review!

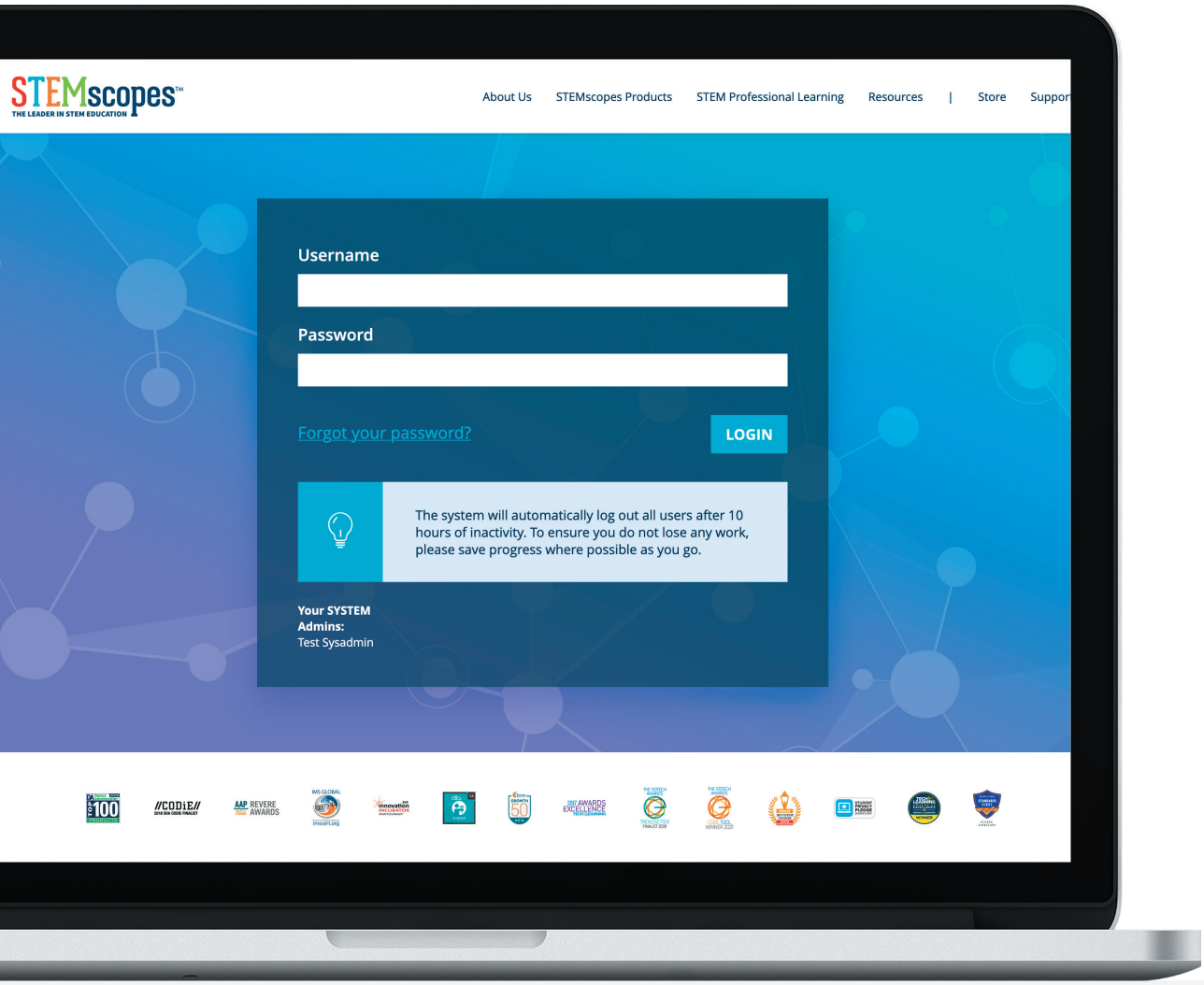
The entire STEMscopes Texas Math curriculum is online.

Use the **navigation steps** to follow along online and explore all that STEMscopes Texas Math offers educators and students.

Access our full curriculum online in two easy ways:

1. Log in using your district's unique review URL and credentials.
2. Sign up at ***accelerateLearning.com/math/tx***.

All student digital and print resources are available in English and Spanish.



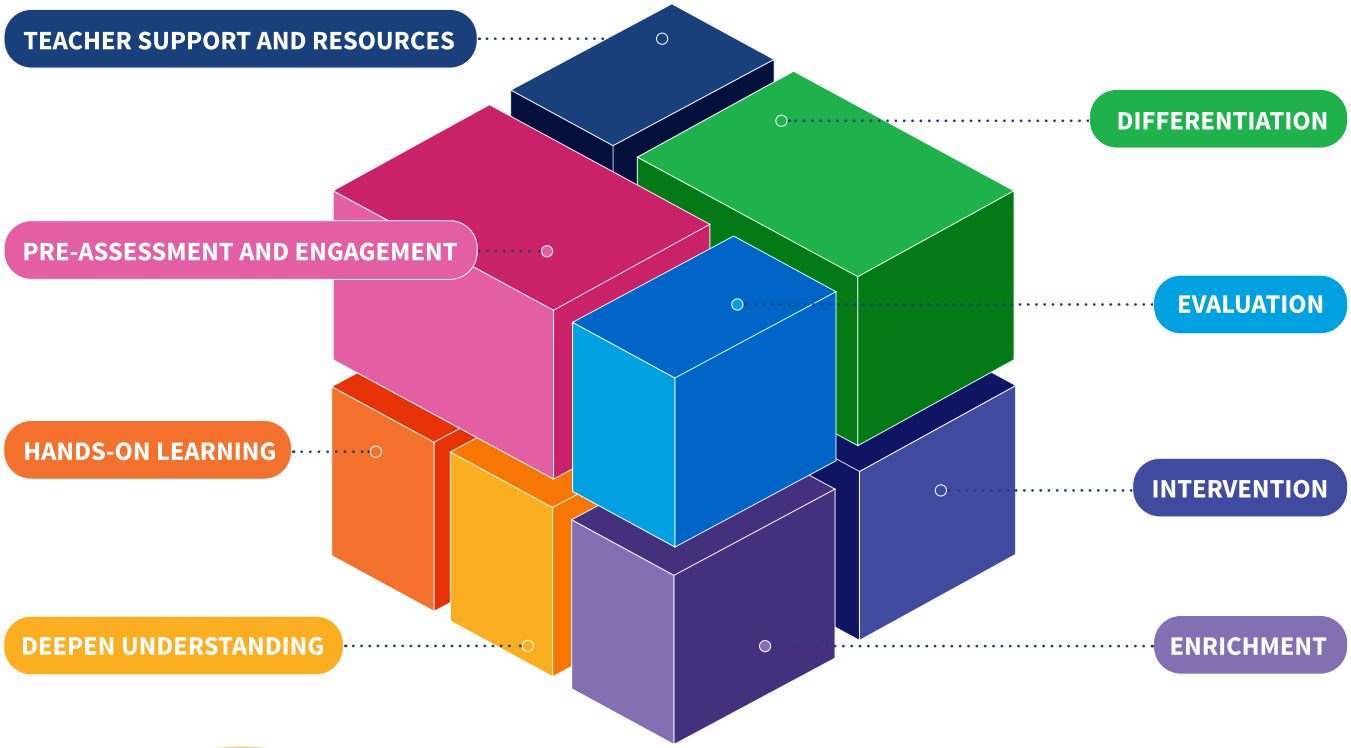
AccelerateLEARNING
THE LEADER in STEM EDUCATION

Lesson Design

A Comprehensive Math Solution

Each lesson is intentionally designed to provide teachers and students with everything they need for engaging and meaningful math instruction and learning.

Everything You Need, All In One Place



Grade 3 Lessons

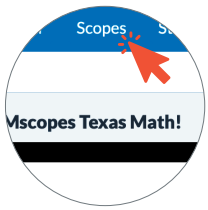
LESSON	TEKS
Addition and Subtraction Strategies	3.2C, 3.4A, 3.4B
Addition and Subtraction Problem Solving	3.4B, 3.5A, 3.4A
Multiplication Models	3.4D, 3.4E, 3.5C, 3.4F, 3.4K
Multiplication Strategies and Algorithms	3.4G, 3.4K
Division Models	3.4H, 3.4I, 3.4J, 3.4F, 3.4K
Multiplication and Division Problem Solving	3.4K, 3.5B, 3.5D
Represent Numerical Relationships	3.5E
Place Value Relationships	3.2A, 3.2B
Compare and Order Numbers	**3.2D**
Represent and Interpret Fractions	3.3A, 3.3B, 3.3E
Compose and Decompose Fractions	3.3C, 3.3D
Equivalent Fractions	3.3F, 3.3G, 3.7A
Compare Fractions	3.3H
Area	3.6C, 3.6D, 3.6E
Perimeter	3.7B
Two- and Three-Dimensional Figures	3.6A, 3.6B
Time	3.7C
Weight and Capacity	3.7D, 3.7E
Represent and Interpret Data	3.8A, 3.8B
Count Money	3.4C
Build a Budget	3.9A, 3.9B, 3.9C, 3.9D, 3.9E, 3.9F

Grade 3,
Compare and Order Numbers

NAVIGATION STEPS

Log In

Use Your Credentials



Click Scopes

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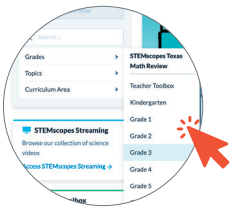

Filter

Filter to 3rd Grade on the Left-Hand Side

Select Tile

Select and Click on the Compare and Order Numbers Scope Tile

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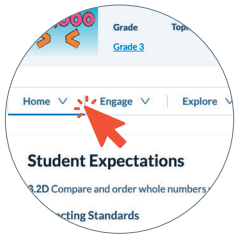
Home

NAVIGATION STEPS



Click Home

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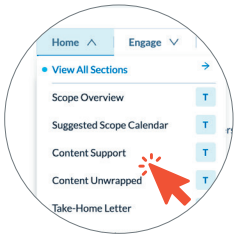


Review Content

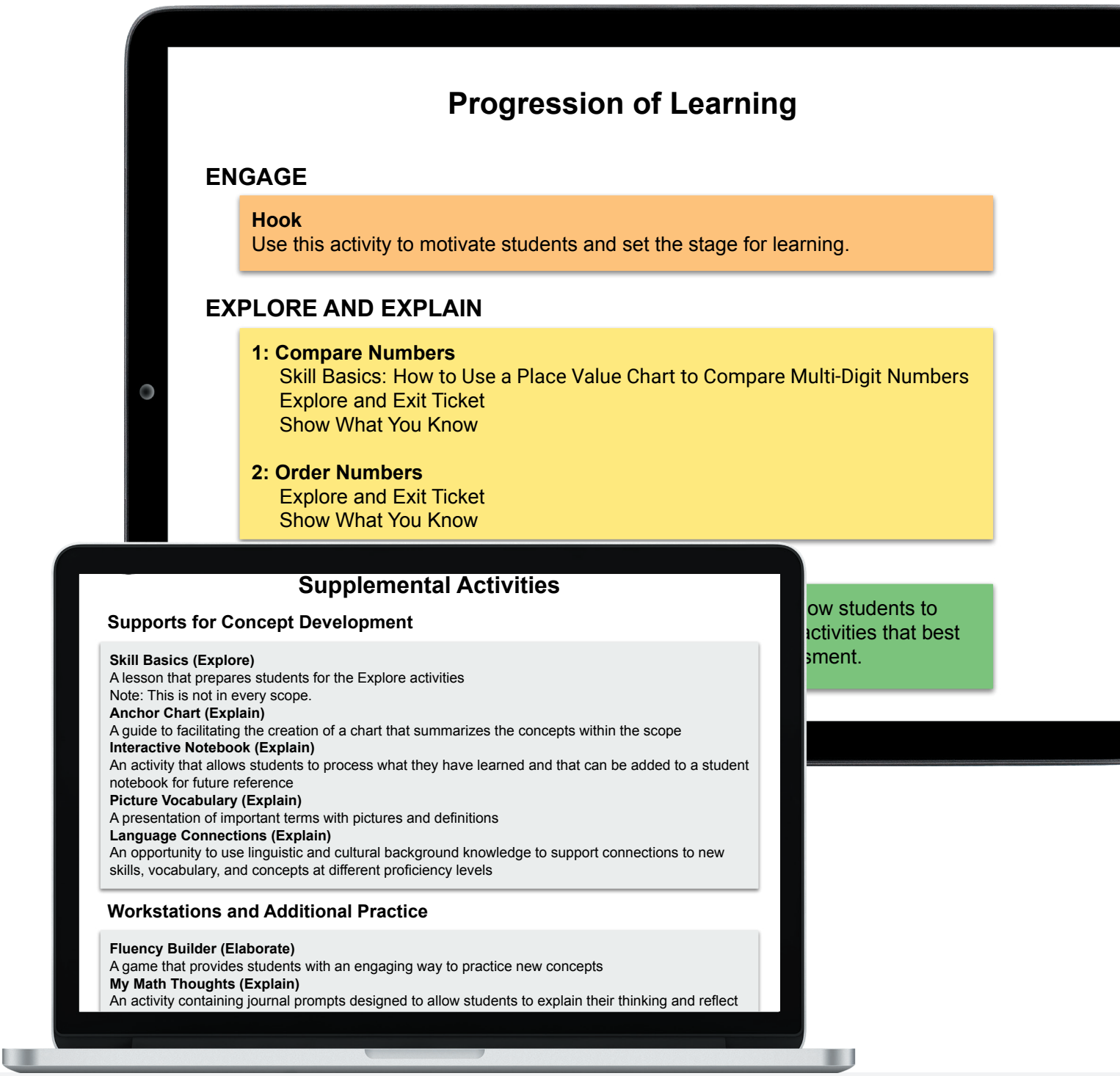
Use the Dropdown to Review Teacher Support and Resources

Our program is built by practicing and former teachers, so we know what you need to teach and that your curriculum should provide it all.

Each lesson starts with a tailored **Home** section with planning essentials, including a daily lesson calendar, comprehensive standards analysis, and letters for communicating with families.

SCOPE OVERVIEW

The Scope Overview provides a comprehensive insight into the key components that enable teachers to deliver a well-rounded and effective learning experience. It includes a Progression of Learning, which details the essential elements for mastering the standards and offers Supplemental Activities that present various options for assessment, intervention, and enrichment of the core content.



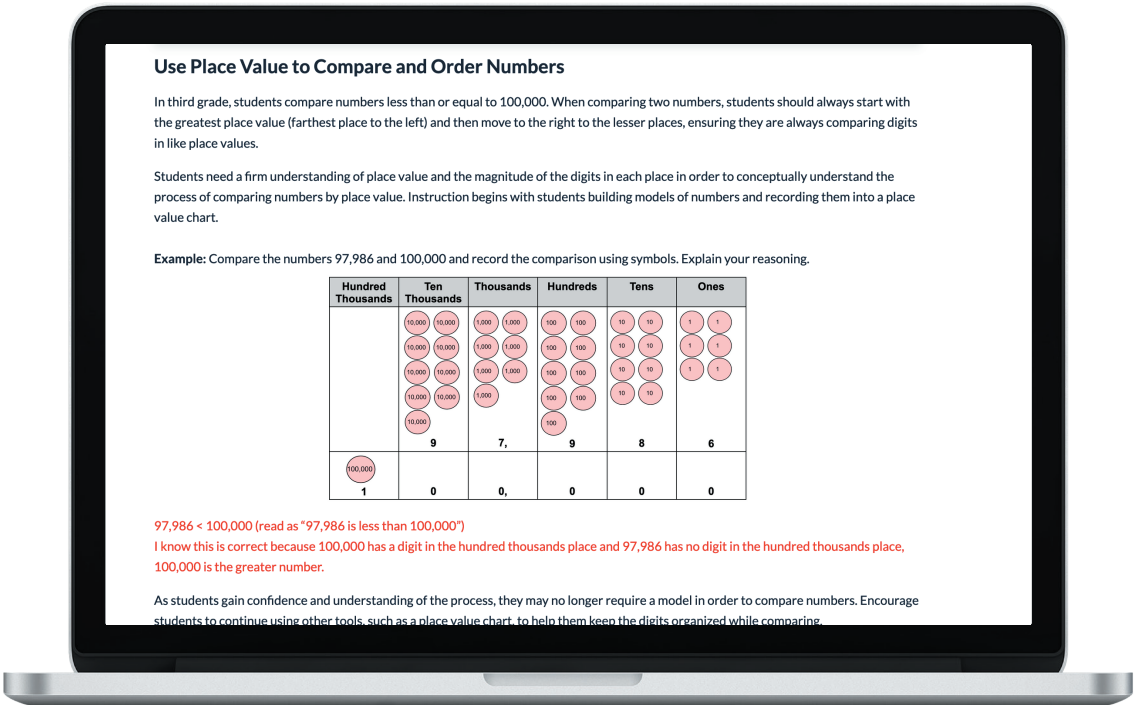
CONTENT SUPPORT

Content Support is a comprehensive unit overview that provides the background content knowledge and academic vocabulary necessary to effectively teach the concepts in the unit.

3.2D Compare and order whole numbers up to 100,000 and represent comparisons using the symbols >, <, or =.

Background Knowledge

Students are introduced to the idea of comparing and ordering numbers beginning in kindergarten. Students have a foundational understanding of comparative language and symbols. They also possess an understanding of how to use place value to compare numbers. In second grade, students master comparing and ordering numbers to 1,200.



Use Place Value to Compare and Order Numbers

In third grade, students compare numbers less than or equal to 100,000. When comparing two numbers, students should always start with the greatest place value (farthest place to the left) and then move to the right to the lesser places, ensuring they are always comparing digits in like place values.

Students need a firm understanding of place value and the magnitude of the digits in each place in order to conceptually understand the process of comparing numbers by place value. Instruction begins with students building models of numbers and recording them into a place value chart.

Example: Compare the numbers 97,986 and 100,000 and record the comparison using symbols. Explain your reasoning.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	9	7,	9	8	6
1	0	0,	0	0	0

97,986 < 100,000 (read as "97,986 is less than 100,000")
I know this is correct because 100,000 has a digit in the hundred thousands place and 97,986 has no digit in the hundred thousands place, 100,000 is the greater number.

As students gain confidence and understanding of the process, they may no longer require a model in order to compare numbers. Encourage students to continue using other tools, such as a place value chart, to help them keep the digits organized while comparing.

CONTENT UNWRAPPED

Content Unwrapped breaks down the TEKS by identifying the nouns and verbs within the standards, includes a list of instructional implications, and provides a vertical alignment.

Standards

3.2D Compare and order whole numbers up to 100,000 and represent comparisons using the symbols >, <, or =.

Breakouts

(i) Compare whole numbers up to 100,000.

(ii) Order whole numbers up to 100,000.

(iii) Represent comparisons using the symbols >, <, or =.

Verbs: What should students be doing?

- *compare*: to determine similarities or differences between two or more objects or numbers
- *order*: To arrange into a sequence
- *represent*: To show in some way; to stand for something

Nouns: What concrete words should students know?

- *symbol*: A character used to represent a value or process
- *whole number*: A numerical value with no decimal or fractional part

Implications for Instruction

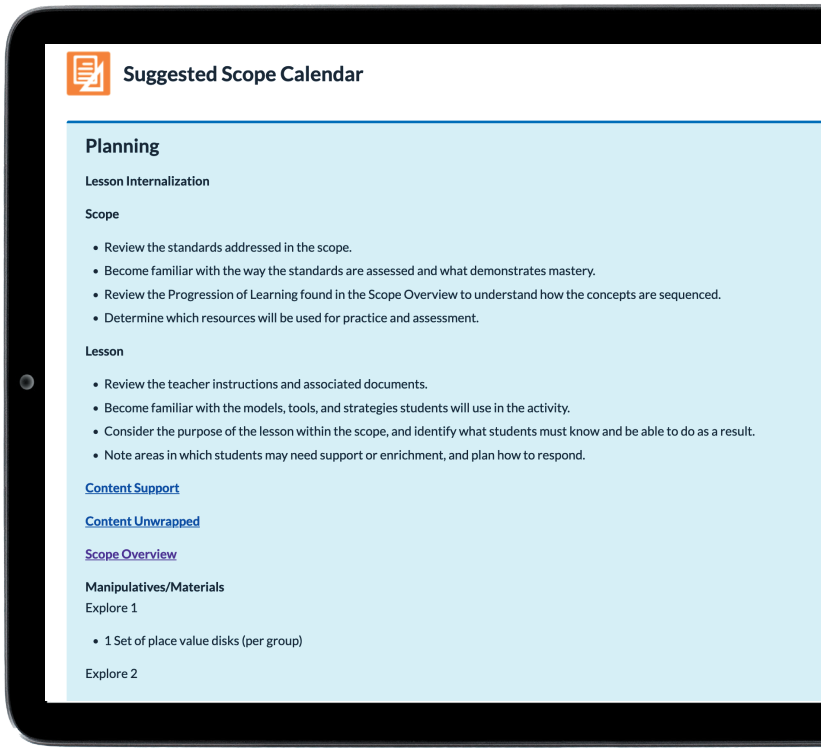
- Students have had many prior experiences comparing and ordering numbers with and without symbols. However, they have only compared and ordered numbers up to 1,200.
- Emphasize precise mathematical language by referring to numbers as *greater* and *less* (or *fewer*) than another number instead of saying *larger* or *smaller*.
- Students have had two years of experience with the comparison symbols >, <, and =. However, students often find the symbols confusing and build misconceptions about their meanings. Some students have the following misconceptions:
  - The > and < symbols are mouths of alligators or monsters that eat the greater numbers. Instead, students need to understand that these are mathematical symbols that represent a relationship.
  - The > and < symbols are the same symbol, but sometimes it is flipped to one side or the other. Instead, students need to understand that > is its own symbol that means "greater than," and < is its own symbol that means "less than."
  - If a number begins with a greater digit, it must be the greater number. Instead, students should compare digits in like place values, beginning with the greatest place value. For example, one ten-thousand is still greater than nine thousands even though the digit 1 is greater than the digit 9.

Vertical Alignment

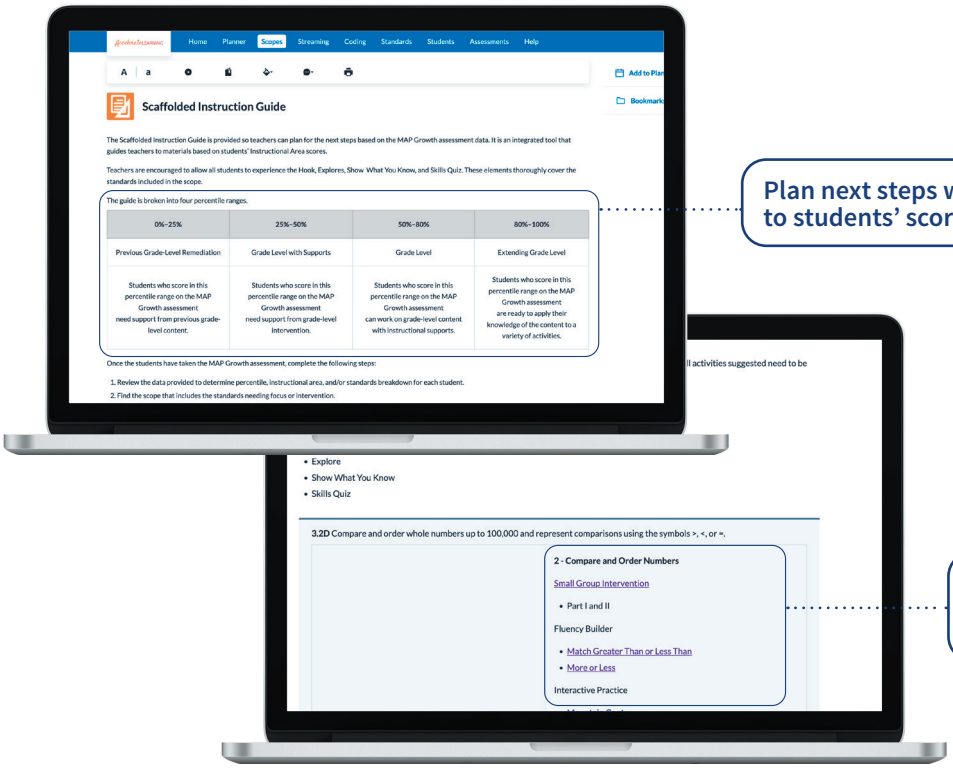
STANDARD
K.2G Compare sets of objects up to at least 20 in each set using comparative language.
K.2H Use comparative language to describe two numbers up to 20 presented as written numerals.
1.2E Use place value to compare whole numbers up to 120 using comparative language.
1.2F Order whole numbers up to 120 using place value and open number lines.
1.2G Represent the comparison of two numbers to 100 using the symbols >, <, or =.
2.2D Use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols (>, <, or =).
3.2D Compare and order whole numbers up to 100,000 and represent comparisons using the symbols >, <, or =.
4.2C Compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols >, <, or =.
5.2B Compare and order two decimals to thousandths and represent comparisons using the symbols >, <, or =.
6.2D Order a set of rational numbers arising from mathematical and real-world contexts.
8.2D Order a set of real numbers arising from mathematical and real-world contexts.

SUGGESTED SCOPE CALENDAR

Dive deep into comprehensive, structured unit and lesson plans that detail daily objectives, questions, tasks, materials, instructional assessments, and suggested timing.



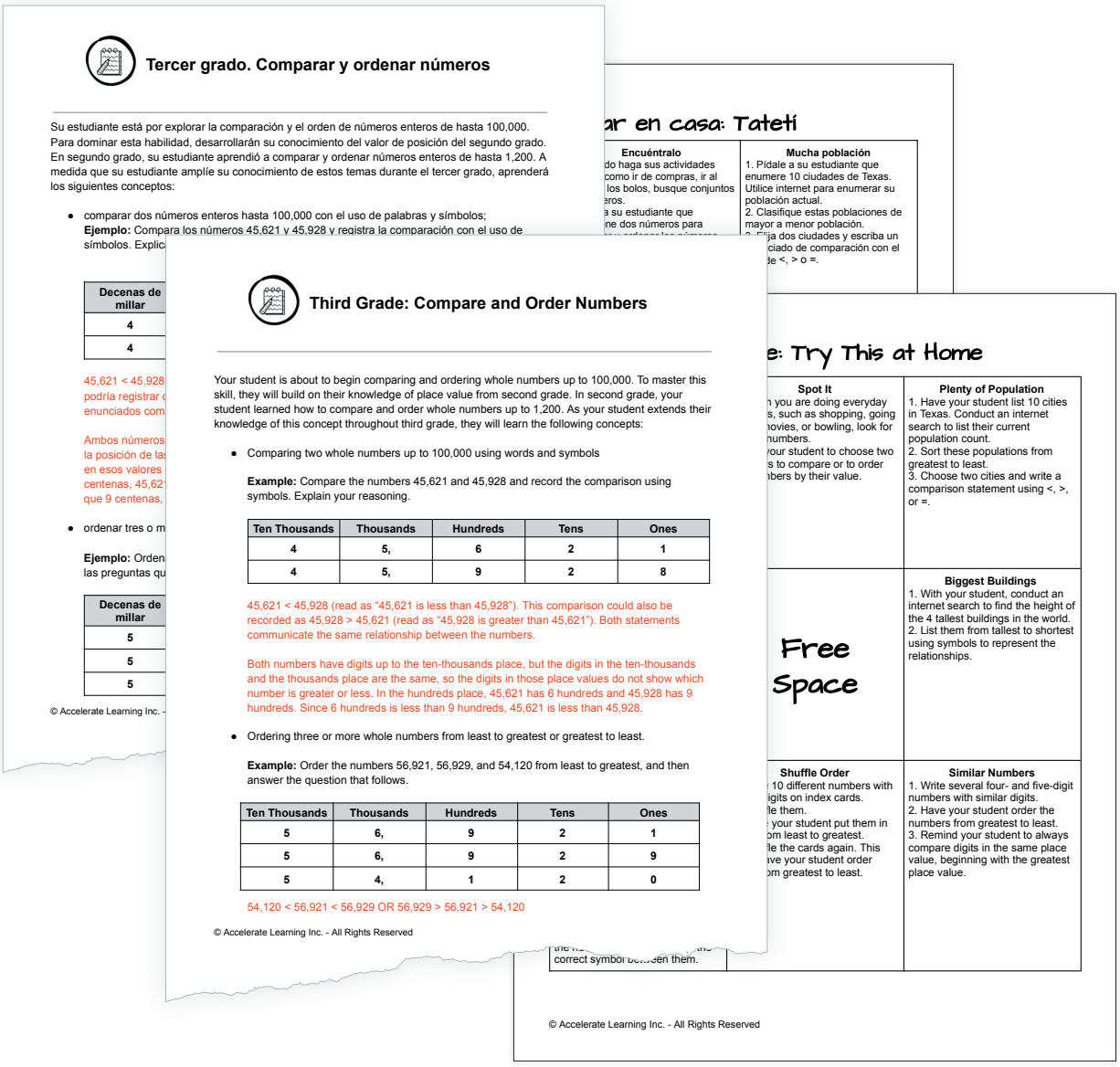
SCAFFOLDED INSTRUCTION GUIDE



TAKE-HOME LETTER

Procedure and Facilitation Points

1. As you prepare for each scope, send a Take-Home Letter with students the week before to explain planned concepts and ways to help at home.
2. Have students return a signed copy of the Tic-Tac-Toe: Try This at Home page when completed to share with the class.
3. Be prepared to explain activities as questions arise. Some letters include resources that should be cut out and used with students.



Tercer grado. Comparar y ordenar números

Su estudiante está por explorar la comparación y el orden de números enteros de hasta 100,000. Para dominar esta habilidad, desarrollarán su conocimiento del valor de posición del segundo grado. En segundo grado, su estudiante aprendió a comparar y ordenar números enteros de hasta 1,200. A medida que su estudiante amplíe su conocimiento de estos temas durante el tercer grado, aprenderá los siguientes conceptos:

- comparar dos números enteros hasta 100,000 con el uso de palabras y símbolos;
  Ejemplo: Compara los números 45,621 y 45,928 y registra la comparación con el uso de símbolos. Explic

Decenas de millar
4
4

45,621 < 45,928
podría registrar
enunciados com

Ambos números
la posición de la
en esos valores
centenas, 45,62
que 9 centenas,

- ordenar tres o m

Ejemplo: Orden
las preguntas qu

Decenas de millar
5
5
5

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ar en casa: Tateti

Encuéntralo do haga sus actividades como ir de compras, ir al los bolos, busque conjuntos eros.	**Mucha población** 1. Pídale a su estudiante que enumere 10 ciudades de Texas. Utilice internet para enumerar su población actual. 2. Clasifique estas poblaciones de mayor a menor población.
a su estudiante que ne dos números para	ja dos ciudades y escriba un ciado de comparación con el de <, > o =.

Third Grade: Compare and Order Numbers

Your student is about to begin comparing and ordering whole numbers up to 100,000. To master this skill, they will build on their knowledge of place value from second grade. In second grade, your student learned how to compare and order whole numbers up to 1,200. As your student extends their knowledge of this concept throughout third grade, they will learn the following concepts:

- Comparing two whole numbers up to 100,000 using words and symbols

  Example: Compare the numbers 45,621 and 45,928 and record the comparison using symbols. Explain your reasoning.

Ten Thousands	Thousands	Hundreds	Tens	Ones
4	5,	6	2	1
4	5,	9	2	8

45,621 < 45,928 (read as "45,621 is less than 45,928"). This comparison could also be recorded as 45,928 > 45,621 (read as "45,928 is greater than 45,621"). Both statements communicate the same relationship between the numbers.

Both numbers have digits up to the ten-thousands place, but the digits in the ten-thousands and the thousands place are the same, so the digits in those place values do not show which number is greater or less. In the hundreds place, 45,621 has 6 hundreds and 45,928 has 9 hundreds. Since 6 hundreds is less than 9 hundreds, 45,621 is less than 45,928.

- Ordering three or more whole numbers from least to greatest or greatest to least.

  Example: Order the numbers 56,921, 56,929, and 54,120 from least to greatest, and then answer the question that follows.

Ten Thousands	Thousands	Hundreds	Tens	Ones
5	6,	9	2	1
5	6,	9	2	9
5	4,	1	2	0

54,120 < 56,921 < 56,929 OR 56,929 > 56,921 > 54,120

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e: Try This at Home

Spot It n you are doing everyday s, such as shopping, going ovies, or bowling, look for numbers. our student to choose two s to compare or to order bers by their value.	**Plenty of Population** 1. Have your student list 10 cities in Texas. Conduct an internet search to list their current population count. 2. Sort these populations from greatest to least. 3. Choose two cities and write a comparison statement using <, >, or =.
Free Space	**Biggest Buildings** 1. With your student, conduct an internet search to find the height of the 4 tallest buildings in the world. 2. List them from tallest to shortest using symbols to represent the relationships.
Shuffle Order 10 different numbers with igits on index cards. le them. your student put them in om least to greatest. le the cards again. This ve your student order om greatest to least.	**Similar Numbers** 1. Write several four- and five-digit numbers with similar digits. 2. Have your student order the numbers from greatest to least. 3. Remind your student to always compare digits in the same place value, beginning with the greatest place value.

correct symbol between them.

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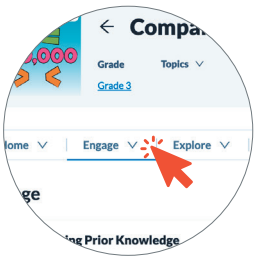
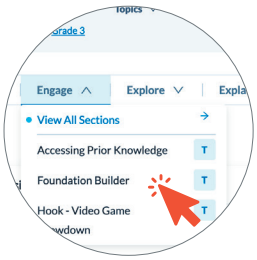
Engage

NAVIGATION STEPS



Click Engage

Click on Engage in the White Menu Bar



Review Content

Use the Dropdown to Review Engage Content

Our **Engage** activities kick off student learning by capturing students' attention and making math approachable! Use these elements to pinpoint knowledge gaps and inform your instructional approach.

ACCESSING PRIOR KNOWLEDGE

Diagnostic

Accessing Prior Knowledge is a brief, teacher-led activity to gauge students' prior knowledge before engaging in the inquiry process. This diagnostic assessment is aligned with previously taught content standards. Students read five student statements about comparing and ordering numbers and choose the statement they agree with.

Preparation

- Plan to have students work in pairs to complete this activity.
- Print a Student Handout for each pair of students, or prepare to project the Student Handout for the class.
- Print the Open Number Line for each pair.

Procedure and Facilitation Points

1. Divide the class into pairs. Distribute the Student Handout to each pair of students, or project it for all students to see.
2. Instruct students to observe the number of points on the board and read the students' statements that describe the relationships between the numbers.
3. Invite students to work with their partners to represent each number on the Open Number Line to help determine if they agree or disagree with each statement on the Student Handout.
4. Students then record which statements they agree with by writing the statement numbers in the corner of their Open Number Lines.
5. Facilitate a class discussion about why students agreed or disagreed with each statement. This provides an opportunity to gather an understanding of prior student knowledge before beginning the lessons. Encourage students to support their answers, and check for understanding and misconceptions. Sample student responses include the following:
    a. *I do not agree with Statement 1. Just because Jess's number starts with the greatest digit does not make it the greatest number. We have to think about place value too.*
    b. *I agree with Statement 2 because Adolfo's number was furthest to the right on the number line. A number is greater than another number if it is further to the right on the number line.*
    c. *I do not agree with Statement 3. It may not be the greatest number, but that's not because it has two zeros in it. Sometimes lots of zeros can mean a big number! You have to look at the digits in the highest place values to decide if a number is greater or less than another number.*
    d. *I do agree with Statement 4 because the 8 in the hundreds place and the 7 in the tens place mean this number has the highest digits in the highest place values. When I look at Adolfo's and Rich's numbers, I see they both have an 8 in the hundreds place, so we need to look at the tens places. Adolfo's tens place is a 7 (with a value of 70) and Rich's is 0, so 872 is the greatest number.*
    e. *I do agree with Statement 5 because Jess's number only goes to the tens place while the other two numbers have digits in the hundreds place; therefore, it is the least number. Even one hundred is greater than 9 tens.*
6. If students are struggling to complete this task, do the Foundation Builder to fill the gap in prior knowledge before moving on to other parts of the scope.

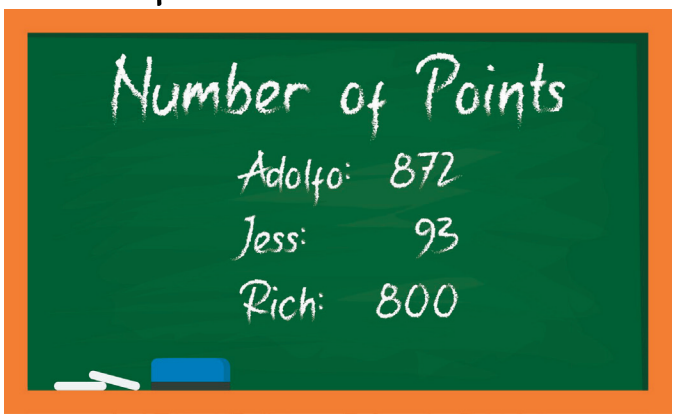
Student Handout

Compare and Order Numbers

ccessing Prior Knowledge

Name: _____ Date: _____

Compare and Order Numbers



Decide if you agree or disagree with each statement, and be prepared to explain your reasoning.

Statement 1
Jess has the greatest number of points because his number begins with a nine.

Statement 2
Adolfo has the greatest number of points because his number is furthest to the right on the number line.

Statement 3
Rich has the smallest number of points because he has two zeros in his number.

Statement 4
Adolfo has the greatest number of points because he has an eight in the hundreds place and a seven in the tens place.

Statement 5
Jess has the least number of points because he does not have a digit in the hundreds place like the others do.

Compare and Order Numbers

ledge

_____ Date: _____

denar números

enunciado y prepárate para explicar tu

orque su número empieza con un nueve.

e su número está más a la derecha en

orque tiene dos ceros en su número.

e tiene un ocho en el lugar de las enas.

Enunciado 5
Jess tiene la menor cantidad de puntos porque no tiene un dígito en el lugar de las centenas como los otros.

FOUNDATION BUILDER

This early intervention activity fills gaps in understanding before diving into new content. Students compare numbers using number lines and place value understandings.

Preparation

- Plan to have students work with partners to complete this activity.
- Prepare to project the Slideshow.
- Print the Student Handout for each student.
- Prepare a set of base ten blocks for each pair of students if desired.
- Print a Number Line for each pair of students and place it in a sheet protector.
- Gather a dry-erase marker for each pair of students.

Procedure and Facilitation Points

Part I

1. Divide students into pairs, and give each pair of students a Number Line and a dry-erase marker.
2. Project the first slide, and ask students to talk to their partners about what they notice or wonder about. Allow time for students to build each number by using the base ten blocks or model the numbers on their number line. After you have allowed some time for discussion, ask students to share their ideas, using the following questions:
    a. What do you notice about these numbers? *Answers will vary. Both numbers share the same digits. The digits are in different places and have different values.*
    b. What do you know about the relationship between these two numbers? *They have the same value in the hundreds place, but the four and the two are in different place values for each of the two numbers.*
    c. What strategies did you use to know which number is greater and which number is less than the other? *I plotted the number on the number line by looking at all the place values beginning at the greatest one and compared each place based on where it would be on the number line. I used base ten blocks to create the numbers, and it takes more blocks to create 642 than 624; I know that 624 is less than 642 because they have the same number of hundreds, but there are only two tens in one number and there are four tens in the other. Four tens are greater than two tens.*
3. Show Slide 2, and ask students to talk to their partners about what they know about the numbers and the symbol being used. Allow time for students to plot the numbers on their number lines using the dry-erase markers and/or build each number using the base ten blocks. Confirm student observations by discussing the numbers' locations on the number line in relation to the symbol.
4. Discuss the following questions:
    a. What do you notice about the location of these numbers on a number line? *Four hundred two is farther to the right than three hundred forty-five. This means it is greater.*
    b. What do you notice about the symbol? What does it mean? *The symbol is the greater than symbol. It is telling us that 345 is greater than 402, which is incorrect.*
    c. Would you change it? How and why? *Yes, I would change it to the less than symbol because 345 is less than 402.*

5. Show Slide 3, and ask students to talk to their partners about what they know about the numbers. Allow time for students to plot the numbers on their number lines using the dry-erase markers and order the numbers from greatest to least. Confirm student observations by discussing the numbers' locations on the number line and the importance of place value. Use the following discussion questions:
    a. What do you notice about the location of these numbers on a number line? *The greater numbers are farther right on the number line. The number 310 is farthest to the right and 103 is farthest to the left.*
    b. What do you notice about the digits in the three numbers? How are they similar? How are they different? *Answers will vary. They are the same digits, but they are in different place values. This means that the values of the digits are different.*
    c. How does this help you determine the greatest number and the least number? *Answers will vary. The greatest number will have the greatest digit in the hundreds place because the highest place value in each number is in the hundreds place.*
6. Project Slides 4 and 5, allow time for students to practice plotting the numbers and using comparative language, and discuss the comparisons.

Part II

1. Keep students in pairs. Distribute a copy of the Student Handout to each student.
2. Ask students to record a pictorial model (number line and/or base ten blocks) of each number and record a comparison sentence using symbols or the ordered list of numbers on the Student Handout. Facilitate a class discussion by walking around, listening, and confirming student understanding using the following questions:
    a. What strategies can we use to compare two numbers? *You can look at the digits in the highest place values. You can also plot the numbers on the number line and use their position to compare the numbers.*
    b. What do you know about number sentences that compare two numbers? *You read number sentences from left to right. We can use the symbols for less than, greater than, and equal to in order to show the relationship between the numbers.*
    c. If I reverse the numbers and comparison symbol, how will this number sentence read? *Answers will vary. The number sentence will still mean the same thing, but will be read differently. For example, 328 is greater than 230 would change to 230 is less than 328.*
    d. What strategies can you use to help you order numbers? *Answers will vary. We can plot the numbers on the number line. The numbers farthest to the left are the smallest numbers, and the numbers to the right are the greater numbers.*
    e. What are the 3 comparison symbols, and how do you know which one to use when making a comparison between numbers? *> means greater than, < means less than, and = means equal to. A number that is farther to the right of another number has greater value and uses the > symbol to show that it lies to the right of the other number. A number that is farther to the left of another number has a lesser value and uses the < symbol to show that it lies to the left of the other number. Numbers that are equal are located at the same point, and they use the = symbol to show that their values are the same.*

Student Handout

Compare and Order Numbers

ndation Builder

Name: _____ Date: _____

Compare and Order Numbers

Compare the numbers 882 and 828.
Pictorial model:
Comparison sentence: _____

Compare the numbers 328 and 230.
Pictorial model:
Comparison sentence: _____

1

Compare and Order Numbers

tion Builder

Name: _____ Date: _____

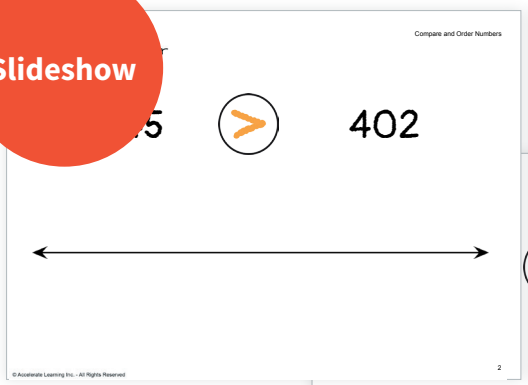
mparar y ordenar números

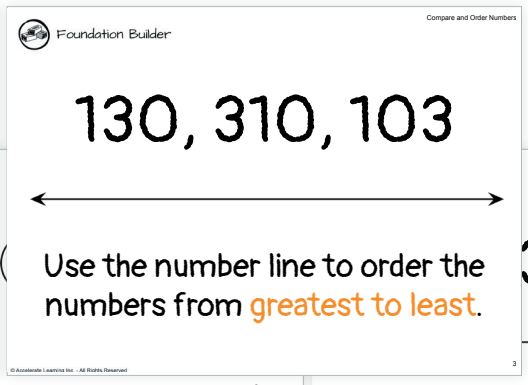
Compara los números 882 y 828.
fico:
paración: _____

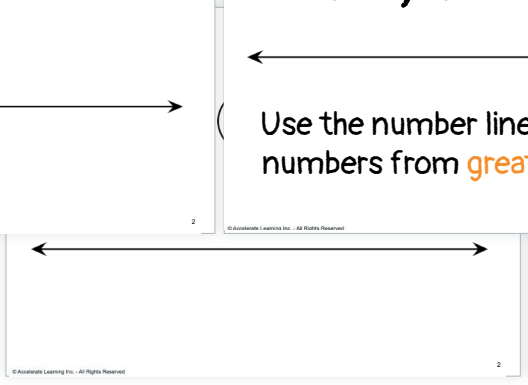
Compara los números 328 y 230.
fico:
nparación: _____

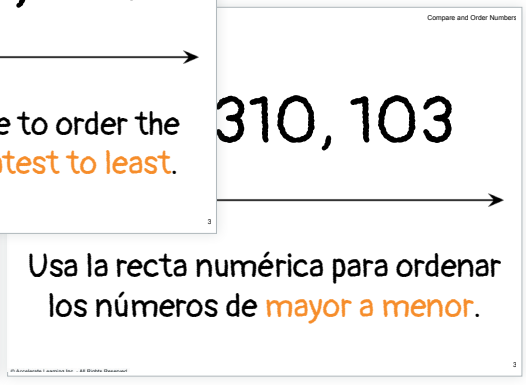
1

Slideshow









HOOK - VIDEO GAME SHOWDOWN

Use the Hook to motivate students and start to connect their learning to real-world contexts. Students compare whole numbers up to 100,000, using the symbols >, <, and =.

Preparation

- Plan to show the Phenomena.

Procedure and Facilitation Points

Part I: Pre-Explore

1. Introduce this activity toward the beginning of the scope. The class will revisit the activity and solve the original problem after students have completed the corresponding Explore activities.
2. Show the Phenomena. Ask students the following questions: What do you notice? Where can you see math in this situation? Allow students to share all ideas.
3. Explain the scenario to the class: You and your friends are playing a video game. You want to know who has the higher score so you can determine who is in first, second, or third place.
4. Allow the students to ask questions and clarify the context as needed. Encourage them to share their thoughts and experiences with the class using the following questions:
    a. Have you ever played a video game? What was it like?
    b. How could you know if someone is in first, second, or third place?
    c. What types of scores have you seen when playing games?
5. Discuss the following questions with the class:
    a. **DOK-1** What information do we know? *We know there are going to be three scores, and we have to decide who is in first, second, and third place.*
    b. **DOK-1** What information do we need to find out? *Once we know the scores, we will need to place the scores in order to determine who is first, second, and third.*
6. Ask students to turn and talk to share how they would solve the problem.
7. Move on to complete the Explore activities.

Part II: Post-Explore

1. After students have completed the Explore activities for this topic, show the Phenomena again, and repeat the scenario.
2. Discuss the following questions with the class:
    a. **DOK-1** What information do we know? *We know there are going to be three scores, and we have to decide who is in first, second, and third place.*
    b. **DOK-1** What information do we need to find out? *Once we know the scores, we will need to place the scores in order to determine who is first, second, and third.*
3. Create an open number line on the board for the whole class to see.

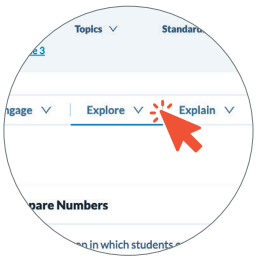
4. Call three students up to the board. Instruct the students to each roll a die. Each student rolls the dice 5 times to generate their video game score. Each number they roll will represent a digit in their video game score. Students record each number rolled somewhere on the board that is easily visible to the rest of the students. Once each student has rolled their dice 5 times and created their five-digit number, read each number out loud. If necessary, rewrite the numbers so they are larger and easier to see.
5. Ask the students to plot their number on the number line and determine the order of the numbers from greatest to least. Have them use place value to support their reasoning.
    a. Optional: Once the five-digit numbers have been determined, provide labeled tickmarks on the open number line before students plot their number.
6. Call on another student to write the scores in order from greatest to least using symbols. Read the comparison to the class and ask them if they agree with the symbol chosen.
7. Discuss the following questions with the class:
    a. **DOK-1** What symbols can we use to compare numbers? *Greater than, less than, equal to*
        - Record these symbols on the board: >, <, =.
    b. **DOK-2** When you have a five-digit number such as the numbers we compared today, which place value do you look at first? *You look at the ten thousands place because it is the greatest place value.*
    c. **DOK-2** If those digits are equal, which place value should you look at next? *You look at the thousands place, then the hundreds, then the tens, and then the ones. The number with the greatest digit in the greatest place value is the greatest number.*
    d. **DOK-2** If the numbers were the same, which symbol would you use? *You would use the equal sign (=).*
8. As an extension, have students write the scores in order from least to greatest. They could also roll the dice with a partner to come up with new scores and put them in order.

Scan and Watch the Hook Phenomena Video

Home | Engage | **Explore** | Explain | Elaborate | Evaluate | Intervention | Acceleration

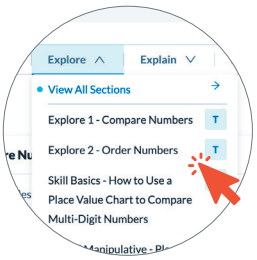
Explore

NAVIGATION STEPS



Click Explore

Click on Explore in the White Menu Bar



Review Content

Use the Dropdown to Review Explore Content

Scaffolded, hands-on **Explore** activities are at the heart of each lesson. We know students learn best by doing, so we go beyond worksheets and memorization, providing opportunities to engage in rich mathematical discourse within real-world contexts.

EXPLORE 1 - COMPARE NUMBERS

Mathematical Process Standards

- (A) Apply mathematics to problems arising in everyday life, society, and the workplace.
- (C) Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.
- (D) Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.
- (F) Analyze mathematical relationships to connect and communicate mathematical ideas.

Preparation

- Plan to have students work in groups of 3–4 to complete this activity.
- Print a Student Journal and an Exit Ticket for each student.
- Print a Stadium Chart for each group.
- Print a Place Value Mat for each group. Place it in a sheet protector so students can write on it with a dry-erase marker.
- Go Digital! Have students explore or present their solutions using virtual manipulatives! The manipulatives used in this lesson can be found in the Explore drop-down menu and can be digitally assigned to students. (Place Value Disks)

Procedure and Facilitation Points

1. Read the following scenario to the class: *The roar of the fans cheering for their team fills your ears! It is the first game of the season and the first time you have gone to a stadium to watch your team play. The excitement in the stands is, well, exciting! As you look around the stadium, you notice how big it is, and you wonder how the size of your stadium compares to other stadiums around the country. After the game, you decide to research the sizes of various stadiums around the United States. You find your hometown stadium has 75,000 seats. Each group will get a copy of the results. Can you compare the number of seats at different stadiums?*
2. Help students access the task by asking the following guiding questions:
   a. Have you ever been to a stadium? What was it like?
   b. How many seats do you think are in our local stadium? (Optionally, look up the number of seats in a local stadium.)
   c. What do stadiums look like?
   d. What do you remember about comparing numbers?
3. Give a Student Journal to each student. Give each group a Stadium Chart, a Place Value Mat, a dry-erase marker, and a set of place value disks. Give students time to talk with their groups about what they notice about the number of seats for each stadium on the Stadium Chart.
4. Instruct students to use place value and number lines to compare the number of seats in the hometown stadium and Benford stadium. They will create a concrete model on their Place Value Mats using place value disks and draw their models on their Student Journals.
5. Students plot both numbers and label them on the number line provided on their Student Journals.

6. Discuss with students how they could use the place value chart and the number line to help them compare numbers using the following guiding questions:
   a. **DOK-1** How can place value help us compare numbers? *We can look at the digits in the greatest place values. The number with the greatest digit in the highest place value is the greater number.*
   b. **DOK-1** How can a number line help us compare numbers? *The number farthest to the right on the number line is the greater number.*
7. Prompt students to record on their Student Journals two comparison statements that represent the relationship using symbols.
   a. If students need additional support remembering the symbols, relate them to the numbers' positions on a number line. For example, a number farther to the left on the number line (<) is less than a number on the right, and the "less than" symbol appears to point to the left.
8. Students continue using their Stadium Charts to complete the remainder of their Student Journals. If needed, students can build concrete models using their place value disks and Place Value Mats before recording the digits in each place value on their Student Journals. Students then plot the numbers on the provided number lines and write comparison statements on their Student Journals.
9. Monitor students, and check for understanding as needed using the following guiding questions:
   a. **DOK-1** What place value did you look at to compare those two numbers? *Answers will vary. We looked at the hundreds place because the digits in the thousands place were the same.*
   b. **DOK-1** How do you know what symbol to use? *If the first number I write is less than the other number, I use the "less than" sign, <. If the first number I write is the greater number, I use the "greater than" sign, >.*
   c. **DOK-1** Why don't we compare the ones place first? *The ones place is the least place value in these numbers. When we compare numbers, we have to start with the digit in the highest place value. If they are the same, we look at the digits in the next highest place value until we find two digits that are different.*
   d. **DOK-1** What if all the digits are the same? *The two numbers are equal.*
   e. **DOK-2** Describe a process you could use to compare numbers using the number line. *We could place both numbers on the number line. If a number is farther to the right, it is greater than the other number. If the number is farther to the left, it is less than the other number.*

Student Journal

Compare and Order Numbers

xplore

Name: _____ Date: _____

Compare Numbers

Using place value disks, compare the number of seats at your hometown stadium and Benford Stadium. Then plot both numbers on the number line to compare.

Stadium Name	Ten Thousands	Thousands	Hundreds	Tens	Ones
Hometown Stadium	_____	_____,	_____	_____	_____
Benford Stadium	_____	_____,	_____	_____	_____

Write a statement that compares the number of seats in your hometown stadium with the number of seats at Benford Stadium using the symbols >, <, or =. Explain how you know your statement is correct.

_____

_____

_____

Compare and Order Numbers

Thousands	Hundreds	Tens	Ones
,			
,			

zly Stadium	Statement 2	Baltic Stadium
_____	_____ ◯	_____

ement from this table, and write how you would read

_____

_____

uld use to compare two numbers.

_____

_____

_____

e shown using two statements?

_____

_____

_____

mbol in a comparison statement?

_____

_____

_____

4

Stadium Charts

Compare and Order Numbers

Stadium Chart

ns cheering for their team fills your ears! game of the season and the first time you have gone to a stadium to watch your team play. The excitement in the stands is, well, exciting! As you look around the stadium, you notice how big it is and you wonder how the size of your stadium compares to other stadiums around the country.

After the game, you decide to research the sizes of various stadiums around the US. You find your hometown stadium has 75,000 seats. The table shows the rest of your research results.

Stadium	Number of Seats
Kent Field	12,733
Baltic Stadium	70,585
Old Era Field	8,079
PLC Stadium	71,054
Benford Stadium	92,746
Mayland Stadium	9,455
Region Field	71,594
Button Field	92,100
Grizzly Stadium	70,083
New Energy Stadium	13,200

Student Journal

Compare and Order Numbers

xplore

Name: _____ Date: _____

¡Qué comiencen los juegos!

Utiliza discos de valor posicional para comparar la cantidad de asientos en el estadio de tu ciudad y en el estadio Benford. Luego traza ambos números en la recta numérica para comparar.

Nombre del estadio	Decenas de millar	Millares	Centenas	Decenas	Unidades
Estadio de mi ciudad	_____	_____,	_____	_____	_____
Estadio Benford	_____	_____,	_____	_____	_____

Escribe un enunciado que compare la cantidad de asientos en el estadio de tu ciudad con la cantidad de asientos en el estadio Benford. Utiliza los símbolos >, < o = en tu enunciado. Explica cómo sabes que tu enunciado es correcto.

_____

_____

_____

Compare and Order Numbers

Millares	Centenas	Decenas	Unidades
,			
,			

	Enunciado 2	
dio Grizzly	Estadio Grizzly	Estadio Báltico
_____	_____ ◯	_____

aración de esta tabla y escribe cómo lo leerías.

_____

_____

ías utilizar para comparar dos números.

_____

_____

_____

ada comparación cuando utilizas dos enunciados?

_____

_____

_____

de = en un enunciado de comparación?

_____

_____

_____

4

Stadium Charts

Compare and Order Numbers

Gráfico del estadio

anáticos que aclama por su equipo llena
s el primer juego de la estación y la primera vez que has ido a un estadio para mirar a tu equipo jugar. La emoción en las gradas es, bueno, ¡emocionante! Al mirar alrededor del estadio, notas qué tan grande es, y te preguntas cómo el tamaño de tu estadio es en comparación a otros alrededor del país.

Después del juego, decides investigar los tamaños de varios estadios alrededor de EE. UU. Encuentras que el estadio de tu ciudad tiene 75,000 asientos. La tabla a continuación muestra el resto de los resultados de tu investigación.

Estadio	Cantidad de asientos
Estadio Kent	12,733
Estadio Báltico	70,585
Campo Era Antigua	8,079
Estadio PLC	71,054
Estadio Benford	92,746
Estadio Mayland	9,455
Campo Región	71,594
Campo Botón	92,100
Estadio Grizzly	70,083
Estadio Nueva Energía	13,200

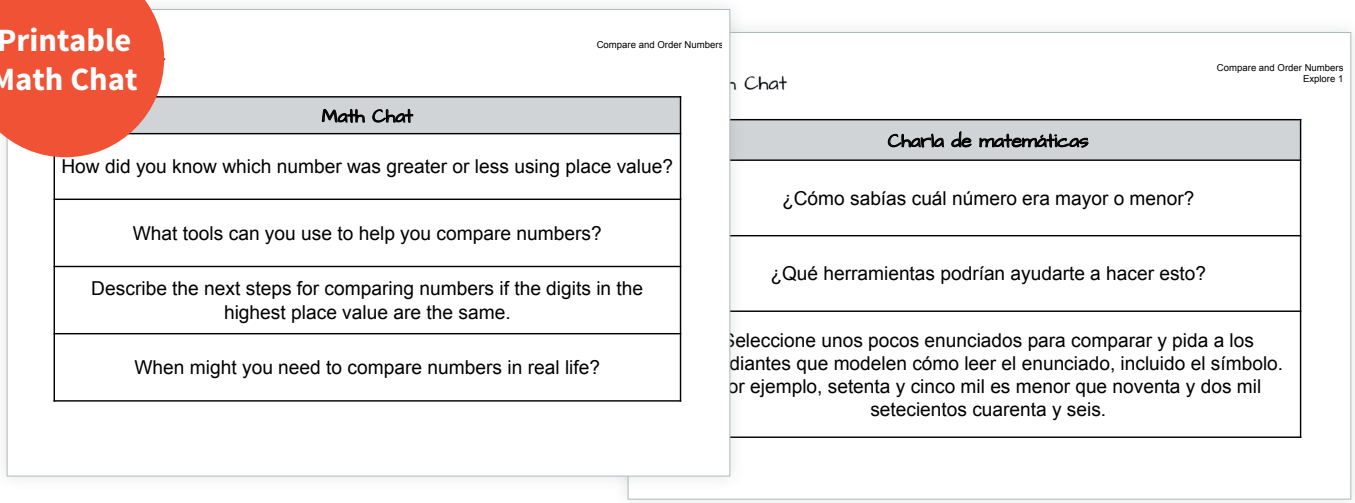
1

Math Chat

After the Explore, invite the class to a Math Chat to share their observations and learning.

Questions	Sample Student Responses
DOK-1 How did you know which number was greater or less using place value?	We looked at the digits in the largest place value. If they were the same, we looked at the digits in the next-highest place value. The greatest digit in the highest place value told us which number was greater. The smallest digit in the highest place value told us which number was less.
DOK-1 What tools can you use to help you compare numbers?	We can build numbers using place value disks to compare them. We can record the numbers in a place value chart and compare them one place value at a time. We can place the numbers on a number line and see which number is greater and which number is less.
Choose a Structured Conversation routine to facilitate the following question: **DOK-2** Describe the next steps for comparing numbers if the digits in the highest place value are the same.	We look at the digits in the next highest place value. The larger digit tells us which number was greater. If the digits are the same in the next highest place value, we move one place value smaller.
DOK-4 When might you need to compare numbers in real life?	You may want to compare the prices of two items at the store, or you could compare the number of points scored in a game.

Printable Math Chat



Compare and Order Numbers

Math Chat
How did you know which number was greater or less using place value?
What tools can you use to help you compare numbers?
Describe the next steps for comparing numbers if the digits in the highest place value are the same.
When might you need to compare numbers in real life?

Compare and Order Numbers
Explore 1

Charla de matemáticas
¿Cómo sabías cuál número era mayor o menor?
¿Qué herramientas podrían ayudarte a hacer esto?
Seleccione unos pocos enunciados para comparar y pida a los diantes que modelen cómo leer el enunciado, incluido el símbolo. or ejemplo, setenta y cinco mil es menor que noventa y dos mil setecientos cuarenta y seis.

Post-Explore - Exit Ticket Formative

Have students complete the Exit Ticket to formatively assess their understanding of the concept.

Exit Ticket

Compare and Order Numbers

Explore

Name: _____ Date: _____

Compare Numbers Exit Ticket

Besides tickets, stadiums sell a lot of food and drinks, which are called concessions. During the first game, your hometown stadium made the following amounts of money on these concession items.

Popcorn	Peanuts
$67,518	$67,457

Choose any strategy to compare the amount of money from popcorn sales and the amount of money from peanut sales using the >, <, or = symbol.

Popcorn ◯ **Peanuts**

_____ (amount) _____ (amount)

Circle which comparison in the chart is true. Explain your reasoning.

peanuts < popcorn	peanuts > popcorn	popcorn = peanuts

_____

_____

_____

Compare and Order Numbers

_____ Date: _____

números
de salida

mucha comida y bebidas, que se llaman
porada, el estadio de tu ciudad recaudó
os artículos de concesión.

Maní
$67,457

cantidad de dinero de las ventas de
de las ventas de maní, utiliza el símbolo >,

Maní

_____ (cantidad)

de la tabla es verdadera. Explica tu

itas de maíz	palomitas de maíz = maní

_____

_____

_____

Instructional Supports

1. Students may benefit from a quick review of comparing numbers up to 1,000 from second grade. Build connections to prior knowledge by reducing numbers to whole numbers up to 1,000 and allowing students to work with base ten blocks and/or number lines to activate their understanding of comparing numbers.
2. If students need additional support with concepts of greater than and less than, review vocabulary with examples and nonexamples, such as "*Greater* means more. What does less mean?" Show students sets of items, and ask them to label one amount as greater than or less than another and explain how they know. Make sure their language and vocabulary are parallel throughout the Explore.
3. When students are checking place value, they may forget to move from left to right. Help them make the connection that this same direction is applied when reading text. To help students keep track of each place value position, have them focus on one place value at a time by covering the place values that are not being compared.
4. If students need additional support with number comparisons, provide them with personal number lines premarked with scaled increments and benchmark numbers that they can practice navigating. Ask them to point to one number and then to another number that is greater than or less than the starting number. Through repeated practice, students will notice that numbers with a greater value are farther to the right, and numbers that have a lesser value are farther to the left.
5. Students sometimes confuse comparison symbols. The more exposure students have to these symbols, the more likely students will be to remember their meanings. When students write each symbol, it is important to hear and say "greater than" or "less than" to help them internalize its meaning. Students can relate the symbols to arrows that point to the direction on a number line. A number to the left (<) of another number has a lesser value, and a number to the right (>) has a greater value.
6. As an extension, students can partner with another student in their groups, and each student can use the Place Value Mat and place value disks to create their own numbers up to 100,000. Student pairs can compare the numbers they created and determine which number is greatest and which number is least.

Language Supports

Display a picture of a stadium, and facilitate a conversation about what students know about this setting.

Using a small group of objects, such as base-ten units, ask students to demonstrate their understanding of comparisons using the phrases *greater than* and *less than*. For students to be successful with this Explore, it is essential that they understand the meanings of these phrases.

Listen to the conversations within student groups, and collect the language they use as they talk about comparing numbers. Create space for students to become familiar with the words and phrases they used to describe their comparisons. Create an anchor chart of the descriptive words they may use, such as *greater than*, *less than*, *equal to*, and *compare*. Record the translated versions of the words in the students' home languages.

Provide students with sentence structures to use throughout the Explore, such as the following:

- I know ___ is greater than ___ because____.
- I know ___ is less than ___ because_____.

Allow students to explain their responses to each scenario and the reflection questions and have a partner write it on the paper for them. Then have the partner read aloud what they wrote. The student can then decide whether their message was clearly communicated and adjust as needed. Students can trade the roles of listener and writer throughout the Explore.

Invite students to present one of their number lines, place value disk models, and comparison statements to the class and explain their process of comparing the given values.

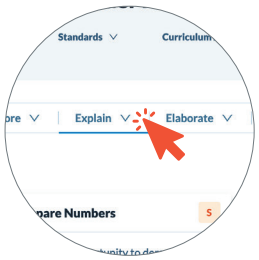
The following English Language Proficiency Standards are supported:
1.ABCFGH, 2.ACDGHI, 3.ABCDEFGHIJ, 4.A, 5.BDEFG

Embedded supports in every lesson!

Home | Engage | Explore | **Explain** | Elaborate | Evaluate | Intervention | Acceleration

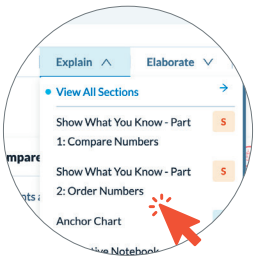
Explain

NAVIGATION STEPS



Click Explain

Click on Explain in the White Menu Bar



Review Content

Use the Dropdown to Review Explain Content

In the **Explain** section, students form authentic connections and apply their learning to various contexts. They deepen their understanding and build confidence as they master the lesson standards.

More practice and formative assessment opportunities!

SHOW WHAT YOU KNOW - PART 1: COMPARE NUMBERS

Formative

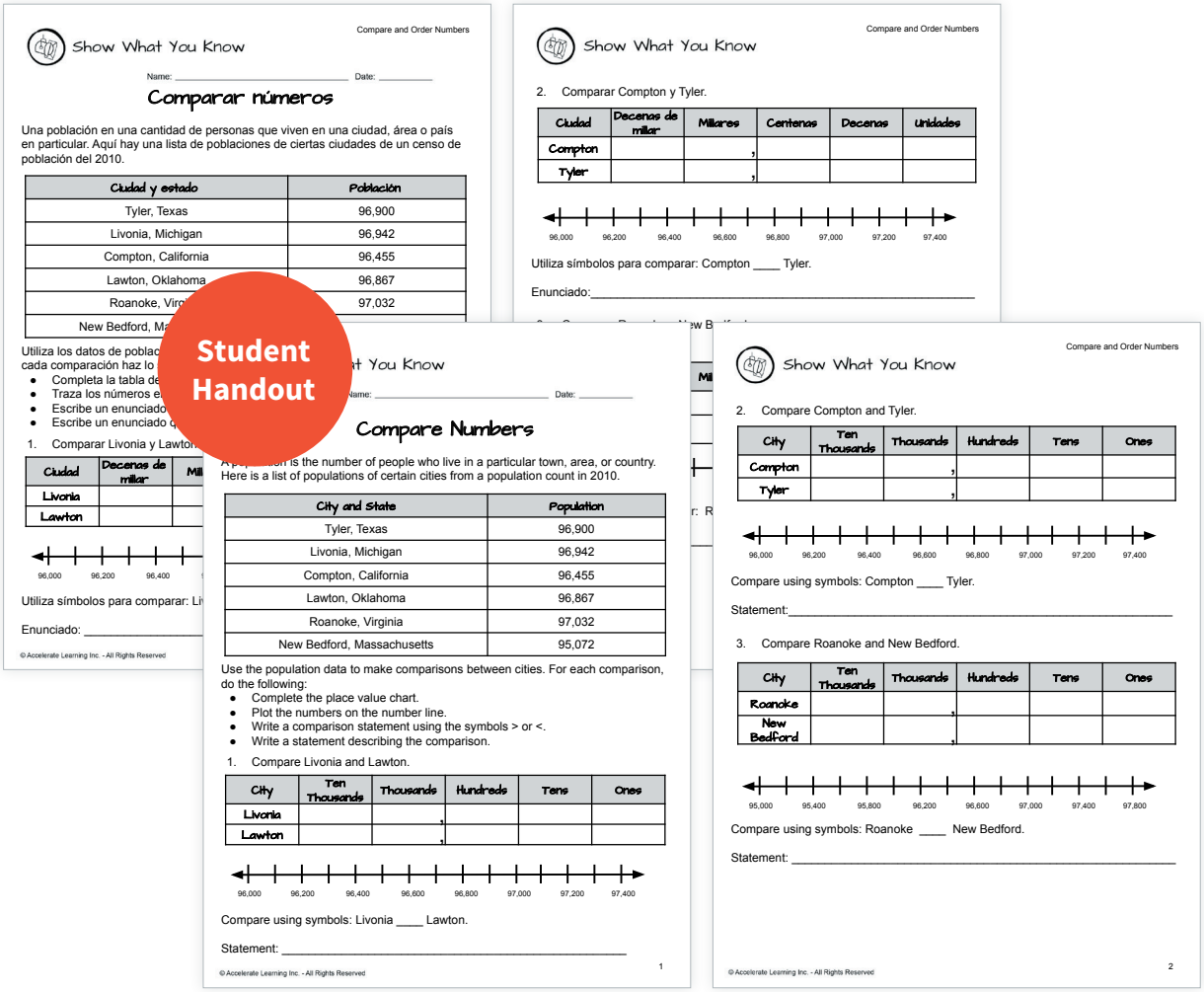
Students apply the knowledge and skills learned during the Explore using this practice.

Preparation

- Print a Student Handout for each student.
- The Show What You Know correlates with the Explore of the same title.

Procedure and Facilitation Points

1. Reading assistance may be needed for some students to complete this activity.
2. Students should individually complete the Show What You Know activity that correlates with the Explore activity already completed.
3. Provide manipulatives as needed, especially those manipulatives used in the Explore.
4. This element can be used to assess whether intervention is needed for each student.



INTERACTIVE NOTEBOOK

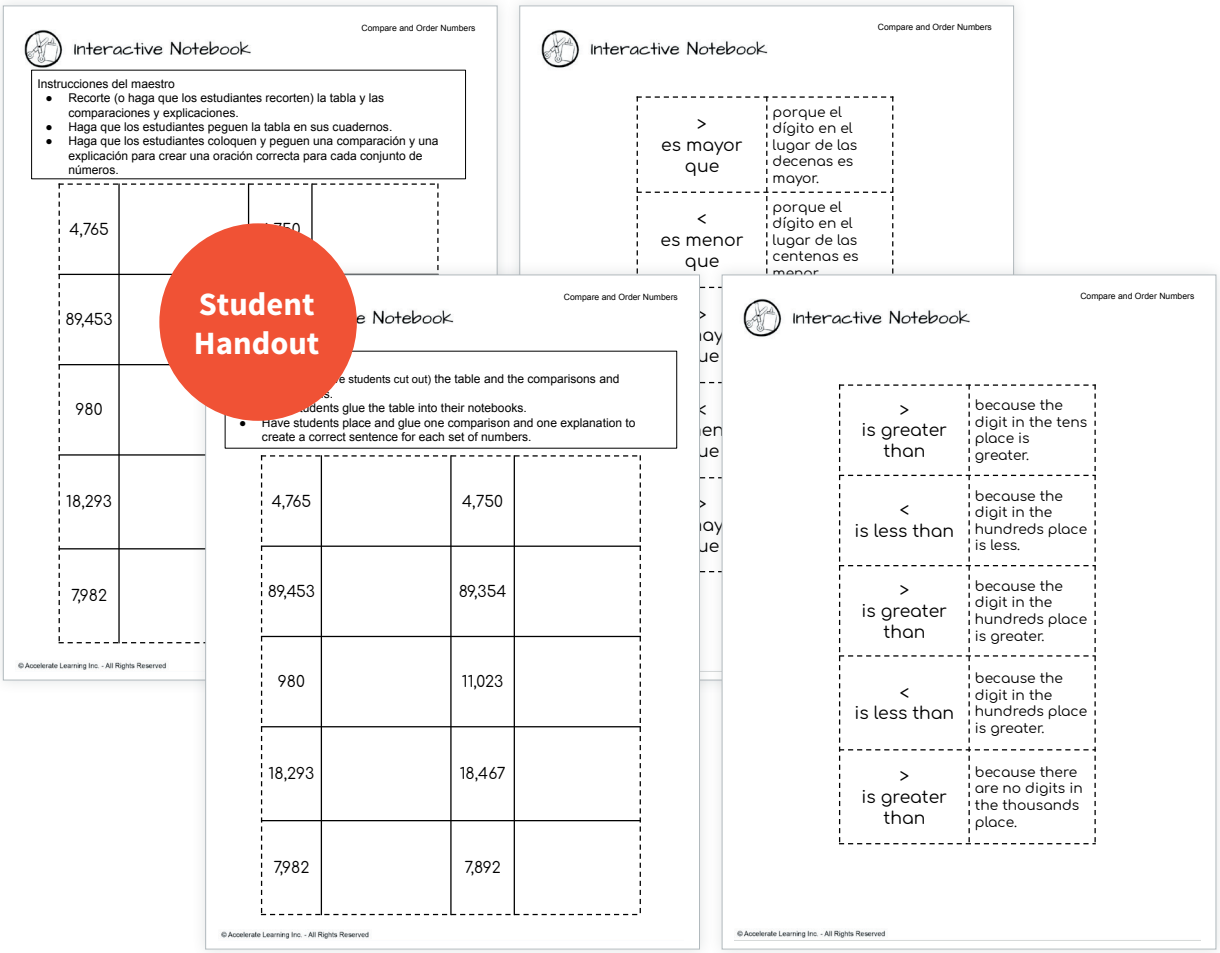
Students take notes, express ideas, and/or process the information presented in class using the activity and notebook.

Preparation

- Print a Student Handout for each student.

Procedure and Facilitation Points

1. Prepare an Interactive Notebook using a spiral or composition notebook for each student. Students can use the first few pages to create a Table of Contents with page numbers to keep track of activities.
2. Pre-cut or allow students to cut the pieces for each Student Handout according to the teacher instructions given in the box on the first page.
3. Allow time for students to complete the activity and then glue the pieces in their Interactive Notebook.
4. Interactive Notebooks can be used as a student reference during independent work and can be sent home at the end of the year as a record of their learning.



LANGUAGE CONNECTIONS

Students have the opportunity to use their linguistic and cultural background knowledge to support connections to new skills, vocabulary, and concepts at their proficiency levels.

Preparation

- Determine each student's English proficiency level.
- Print a Student Handout for each student at their English proficiency level.
- Allow students to have access to the Picture Vocabulary for this scope.
- Print a Place Value Mat for each student. Place it in a sheet protector or laminate for repeated use and durability.
- Prepare a set of place value disks for each student by placing them in a resealable bag.

Procedure and Facilitation Points

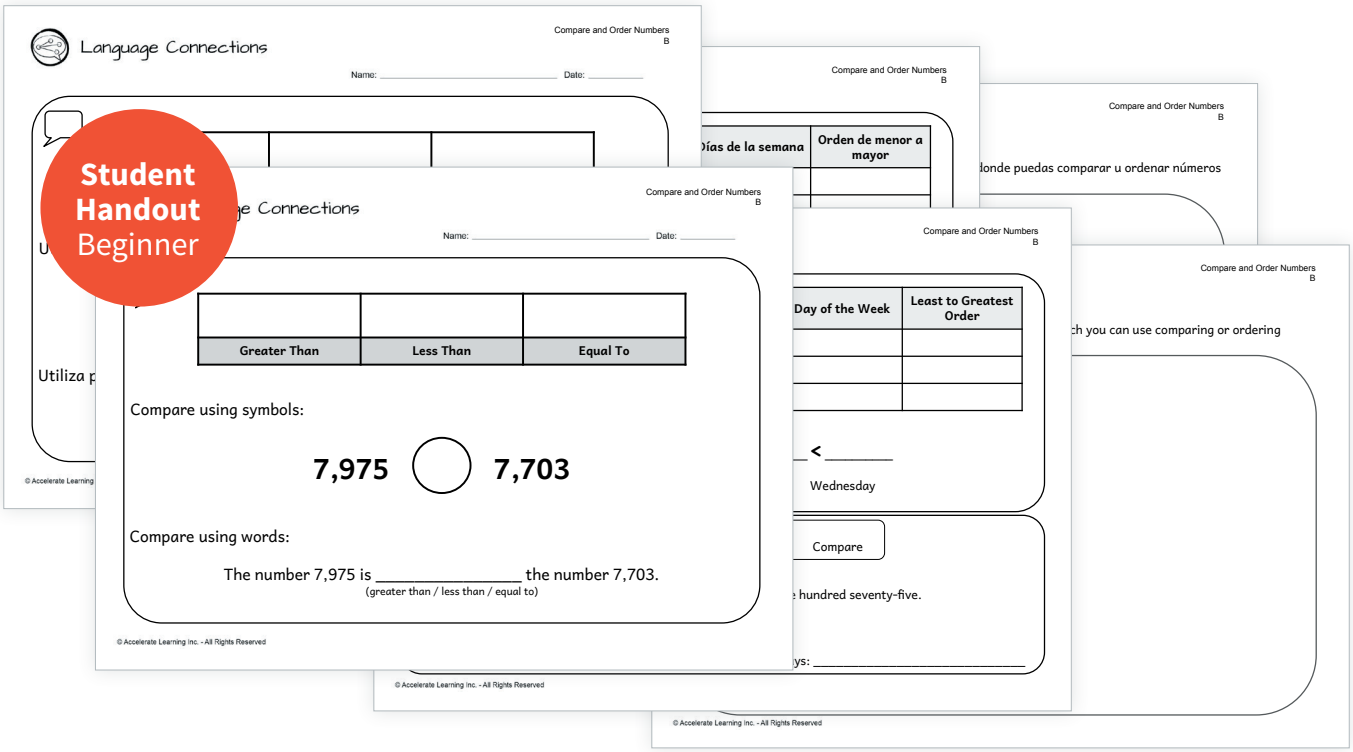
1. Distribute a Student Handout at the appropriate proficiency level to each student.
2. Use the prompts for the listening, speaking, reading, and writing portions. Use gestures, pointing at objects, and visuals as appropriate. See prompts for suggestions.
3. Allow time for students to think with their neighbors before responding.
4. Encourage students to persevere through their thinking and to use mathematical tools and models.
5. Invite students to respond appropriately to each linguistic domain.

Multilingual Learner Support!

Beginner

Distribute place value disks and a place value mat for students to use. Read the following prompts one at a time:

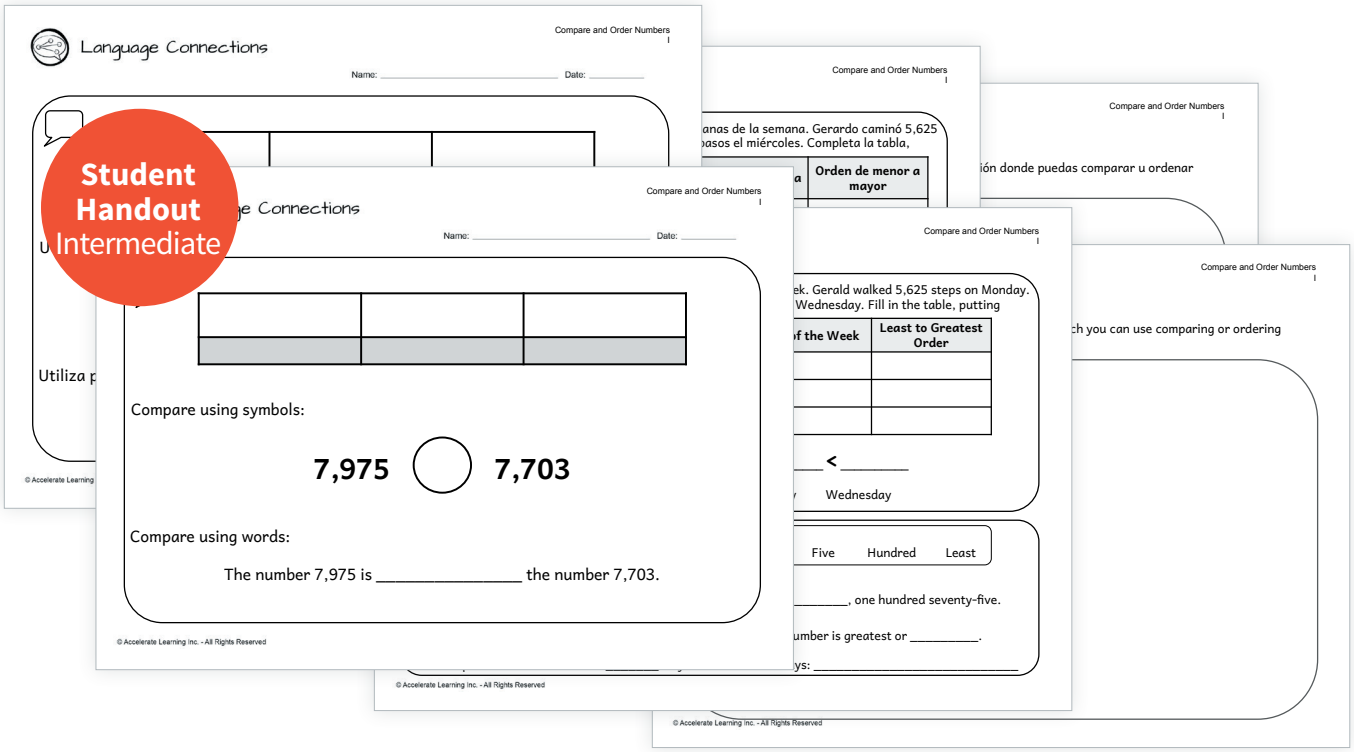
- *Look at the table on your Student Handout* (point to the table).
- *Draw the greater than symbol in this box* (point to the box labeled "greater than").
- *Draw the less than symbol in this box* (point to the box labeled "less than").
- *Draw the equal to symbol in this box* (point to the box labeled "equal to").
- *Point to the number 7,975.*
- *Build the number 7,975 on your place value mat with your place value disks.* (Point to the top row on the place value mat, and model how to use the disks to build.)
- *Point to the number 7,703.*
- *Build the number 7,703 on your place value mat with your place value disks.* (Point to the bottom row on the place value mat, and model how to use the disks to build.)
- *Next you will compare these numbers in two* (hold up two fingers) *ways: using symbols and using words.*
- *Look at your handout. Listen as I read the directions. Point to each word as I read. Compare these numbers using symbols. Write the correct comparison symbol* (point to the comparison symbols) *in the space between the given numbers* (point to the circle between the given numbers).
- *Listen as I read the next set of directions. Point to each word as I read. Compare these numbers using words. Listen as I read the comparison statement. Point to each word as I read. The number 7,975 is greater than/less than/equal to* (point to the phrases underneath the blank as you read each one) *the number 7,703.*
- *Write the correct phrase in the blank to complete the statement.*



Intermediate

Distribute place value disks and a place value mat for students to use. Read the following prompts one at a time:

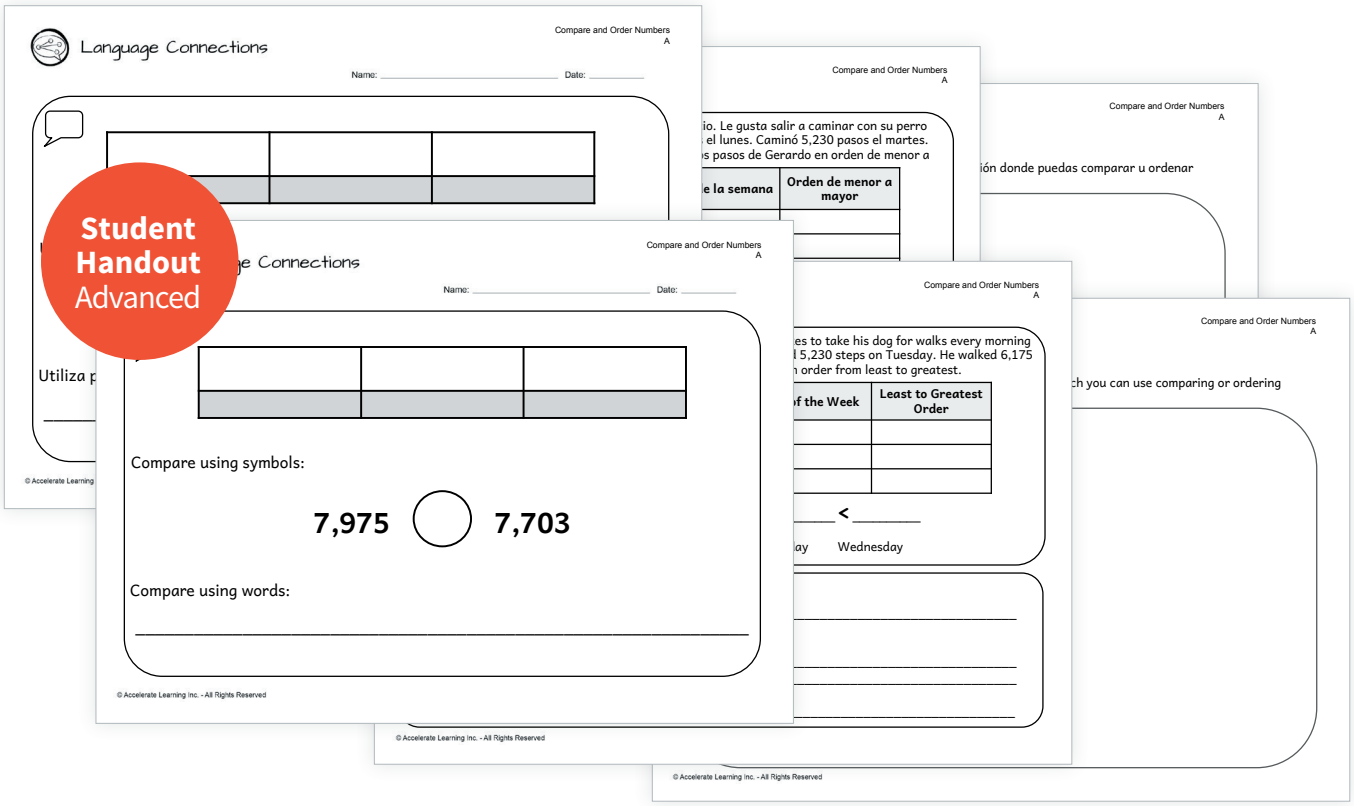
- Have students discuss the following questions with their partners:
  - *What does* greater than *mean? If a number is greater than another number, is it larger or smaller?*
  - *What does* less than *mean? If a number is less than another number, is it larger or smaller?*
  - *What does* equal to *mean? If a number is equal to another number, are the numbers the same or different?*
- *Look at the table on your Student Handout* (point to the table).
- Read each of the following prompts one at a time. Allow students time to fill in the table.
  - *Write* greater than *in the first gray box* (point to this box).
  - *Draw the greater than symbol in the space above your label* (point to this space).
  - *Write less than in the second gray box* (point to this box).
  - *Draw the less than symbol in the space above your label* (point to this space).
  - *Write equal to in the third gray box* (point to this box).
  - *Draw the equal to symbol in the space above your label* (point to this space).
- *Point to the number 7,975.*
- *Point to the number 7,703.*
- *Build the two numbers on your place value mat, and compare.*
- *Next you will compare these numbers in two ways: using symbols and using words.*
- *Compare using symbols. Write the correct comparison symbol* (point to the comparison symbols) *in the space between the given numbers* (point to the circle between the given numbers).
- *Compare using words. Choose the phrase that completes the comparison statement:* greater than, less than, *or* equal to.



Advanced

Distribute place value disks and a place value mat for students to use. Read the following prompts one at a time:

- *Have students discuss the following questions with their partners:*
  - *What does* greater than *mean?*
  - *What does* less than *mean?*
  - *What does* equal to *mean?*
- *Look at the table on your Student Handout.*
- *Write the terms greater than, less than, and equal to in the gray boxes in the table.*
- *Draw the correct comparison symbol above each label in the table.*
- *Build both numbers on your place value mat, and compare.*
- *Compare the numbers using symbols. Write the correct comparison symbol in the space between the given numbers.*
- *Compare the numbers using words. Write a comparison statement.*
- *Share your comparison statement with your partners.*



MY MATH THOUGHTS

Students have the opportunity to write out their mathematical thoughts and ideas using several avenues.

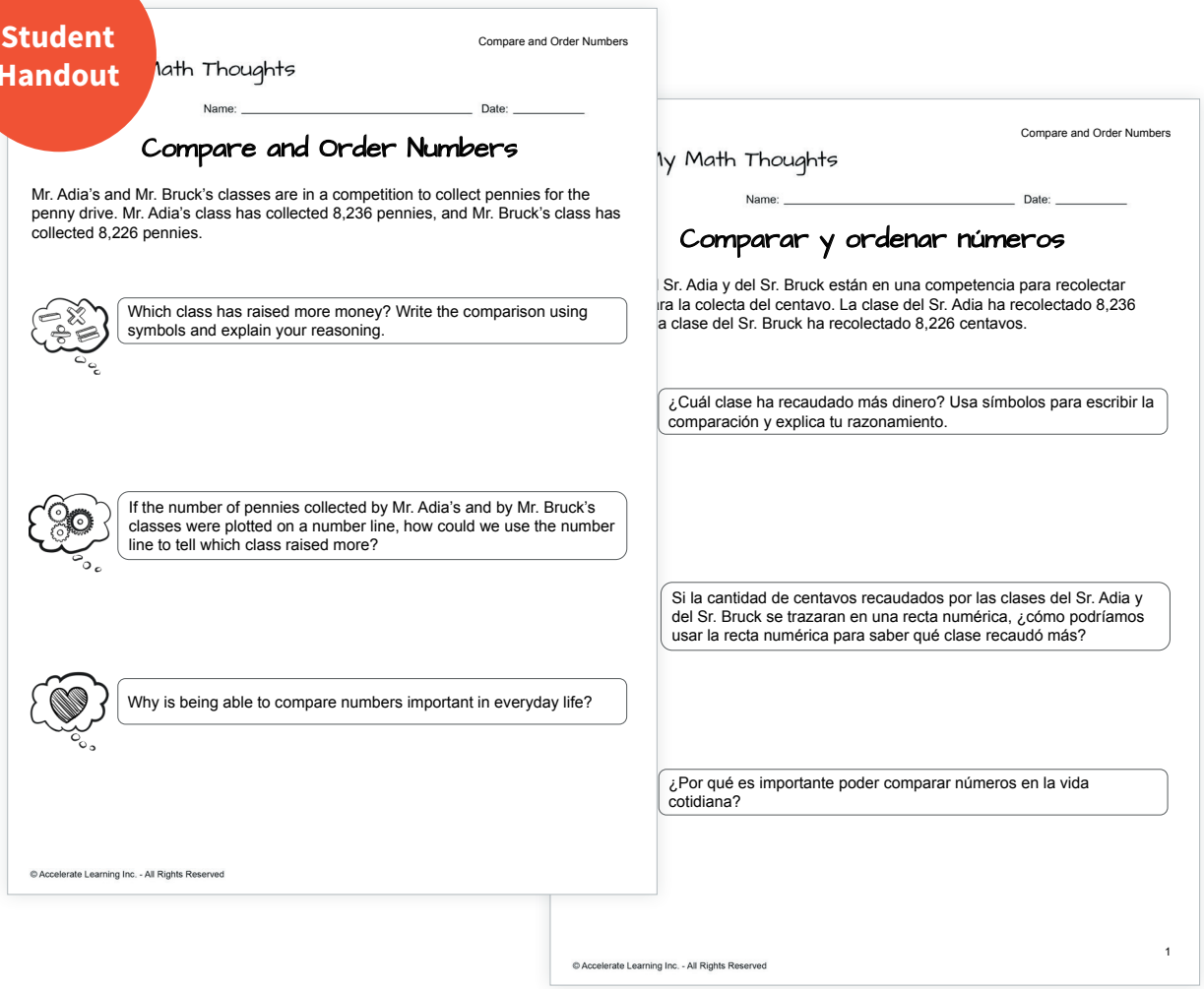
Preparation

- Allow students to have access to a variety of mathematical tools, such as place value blocks and fraction circles, and mathematical models such as place value charts, fraction walls, number lines, etc.

Procedure and Facilitation Points

1. Allow students to discuss their thinking with neighbors before writing their thoughts on paper.
2. Encourage students to persevere through their thinking and to use mathematical tools and models as necessary.
3. Invite students to write their answers in complete sentences using correct spelling, grammar, and punctuation.

Student Handout



Compare and Order Numbers

lath Thoughts

Name: _____ Date: _____

Compare and Order Numbers

Mr. Adia's and Mr. Bruck's classes are in a competition to collect pennies for the penny drive. Mr. Adia's class has collected 8,236 pennies, and Mr. Bruck's class has collected 8,226 pennies.

Which class has raised more money? Write the comparison using symbols and explain your reasoning.

If the number of pennies collected by Mr. Adia's and by Mr. Bruck's classes were plotted on a number line, how could we use the number line to tell which class raised more?

Why is being able to compare numbers important in everyday life?

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Compare and Order Numbers

y Math Thoughts

Name: _____ Date: _____

Comparar y ordenar números

Sr. Adia y del Sr. Bruck están en una competencia para recolectar
ra la colecta del centavo. La clase del Sr. Adia ha recolectado 8,236
a clase del Sr. Bruck ha recolectado 8,226 centavos.

¿Cuál clase ha recaudado más dinero? Usa símbolos para escribir la comparación y explica tu razonamiento.

Si la cantidad de centavos recaudados por las clases del Sr. Adia y del Sr. Bruck se trazaran en una recta numérica, ¿cómo podríamos usar la recta numérica para saber qué clase recaudó más?

¿Por qué es importante poder comparar números en la vida cotidiana?

1

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PICTURE VOCABULARY

Students build academic vocabulary and connect vocabulary to their experiences. This element is meant to be used in tandem with Explores.

Preparation

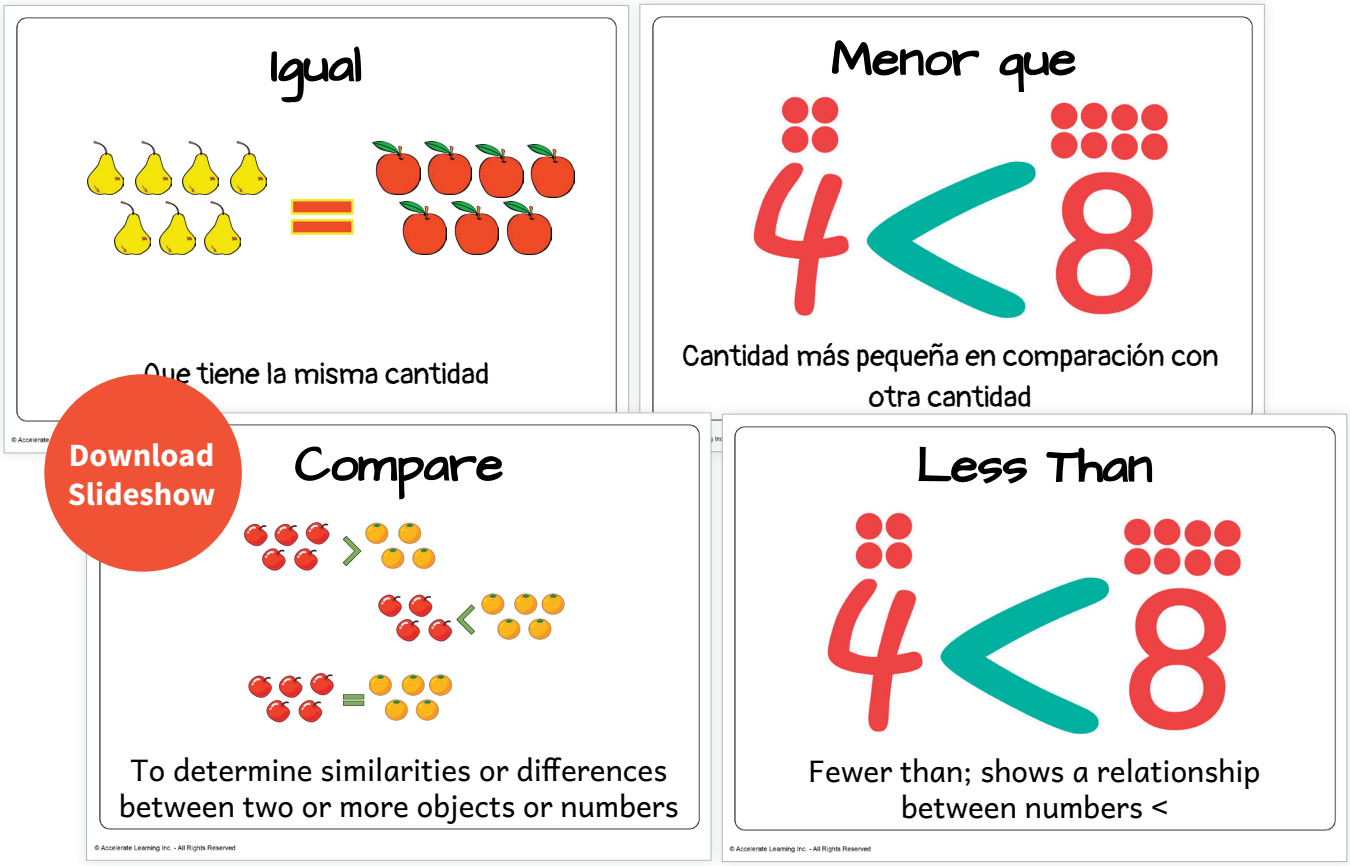
- Prepare to project the Slideshow for the class.
- Print the Student Handout with multiple slides on one page for students to cut and add the Picture Vocabulary to their Interactive Notebooks.

Procedure and Facilitation Points

1. Project the Slideshow for the class.
2. Read words and/or definitions with students. Discuss words or definitions that are unfamiliar to students.
3. Discuss the following questions:
    a. How can you connect this word to your work in the Explore?
    b. How would you rephrase the definition in your own words?
    c. What do you picture in your mind when you hear this word?
4. To practice vocabulary with an engaging game, see Vocabulary Strategies in the Explain section of each Launch scope.
5. Refer to the Slideshow to review Picture Vocabulary as students complete each Explore.

Tips and Tricks

- Print the Student Handout with four slides on a page. Cut out each slide, and create a math word wall in the classroom.
- Download the Picture Vocabulary slides in the Teacher Toolbox under Essentials. Use this to create a slideshow without pictures, and print with multiple slides on one page. To foster student ownership of their own learning, allow students to add their own pictures.


Igual
Que tiene la misma cantidad
Menor que
4 < 8
Cantidad más pequeña en comparación con otra cantidad
Download Slideshow
Compare
To determine similarities or differences between two or more objects or numbers
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Less Than
4 < 8
Fewer than; shows a relationship between numbers <
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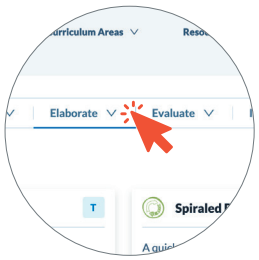
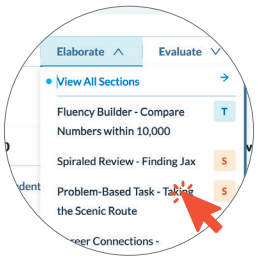
Elaborate

NAVIGATION STEPS



Click Elaborate

Click on Elaborate in the White Menu Bar



Review Content

Use the Dropdown to Review Elaborate Content

Learning math requires a personalized approach. Each lesson's **Elaborate** section offers various resources and activities to differentiate instruction and deepen understanding of diverse learners. This section is ideal for small group instruction, center and station activities, and independent practice.

FLUENCY BUILDER - COMPARE NUMBERS WITHIN 10,000

In this card game, pairs of students use their understanding of greater than and less than to compare.

Preparation

- Print the Student Recording Sheet.
- Print and cut out sets of Comparison Cards and Game Cards.
- Print an Instruction Sheet to go with each set of Comparison Cards and Game Cards.
- Consider laminating all printed materials except for the Student Recording Sheet for long-term use. You can place smaller pieces in envelopes or resealable bags.

Procedure and Facilitation Points

1. Ask for a student volunteer and demonstrate a couple of rounds of the game. Make sure you justify which Game Cards best fit the comparative value.
    a. Shuffle the Comparison Cards, and set them down in a stack between the players. Shuffle the Game Cards, and then deal them equally between players.
    b. Player one takes a turn drawing a Comparison Card and displaying this card faceup. Tell students that the Comparison Cards should remain in a stack on the table after each turn.
    c. Each player selects a card from their hand that they think will most likely match the Comparison Card and places it facedown on the table.
    d. Both players flip over their Game Cards and determine which card displays the greater-than or less-than quantity as indicated on the Comparison Card. Tell students that the winner takes both Game Cards and places them in a stack in front of them.
    e. After each turn, students should pause and record the comparison on their Student Recording Sheets.
    f. Now player two takes a turn drawing a Comparison Card and displaying the card faceup. Play continues as stated above in steps c through e.
2. Group students into pairs.
3. Distribute materials.
4. Have students play until all Game Cards have been played. The player with the most Game Cards wins.
5. As students work, check that they are following instructions and comparing accurately.

Instruction Sheet

Fluency Builder

Greater Than & Less Than

One player flips a Comparison Card. Each player chooses a Game Card and places it facedown.

Both players flip their Game Cards at the same time.

The player who correctly matches the Comparison Card wins the round and keeps both Game Cards.

The person

Greater Than and Less Than Game Cards

Fluency Builder

Tarjetas de juego (frente)

6,204	8,199	1,304	7,225
2,104	1,001	9,994	1,101
9,044	5,109	9,104	1,146
9,100	7,104	8,992	4,200
1,046	2,104	1,035	9,046
9,354	2,106	1,230	1,014
8,104	2,013	6,029	8,154
9,104			1,107

Fluency Builder

Game Cards (Front)

	8,199	1,304	7,225
2,104	1,001	9,994	1,101
9,044	5,109	9,104	1,146
9,100	7,104	8,992	4,200
1,046	2,104	1,035	9,046
9,354	2,106	1,230	1,014
8,104	2,013	6,029	8,154
9,104			

1,101
1,146
4,200
9,046
1,014
8,154
1,107

Comparison Cards

Fluency Builder

Comparison Cards

Greater Than

Less Than

Fluency Builder

Tarjetas de comparación

Mayor que

Menor que

Student Recording Sheet

Fluency Builder

Name: Date:

Greater Than & Less Than

Student Recording Sheet

Player one: Player two:

Player One's Number	Player Two's Number	Comparison (Use > or <)	Winner!

Compare Decimals

Fluency Builder

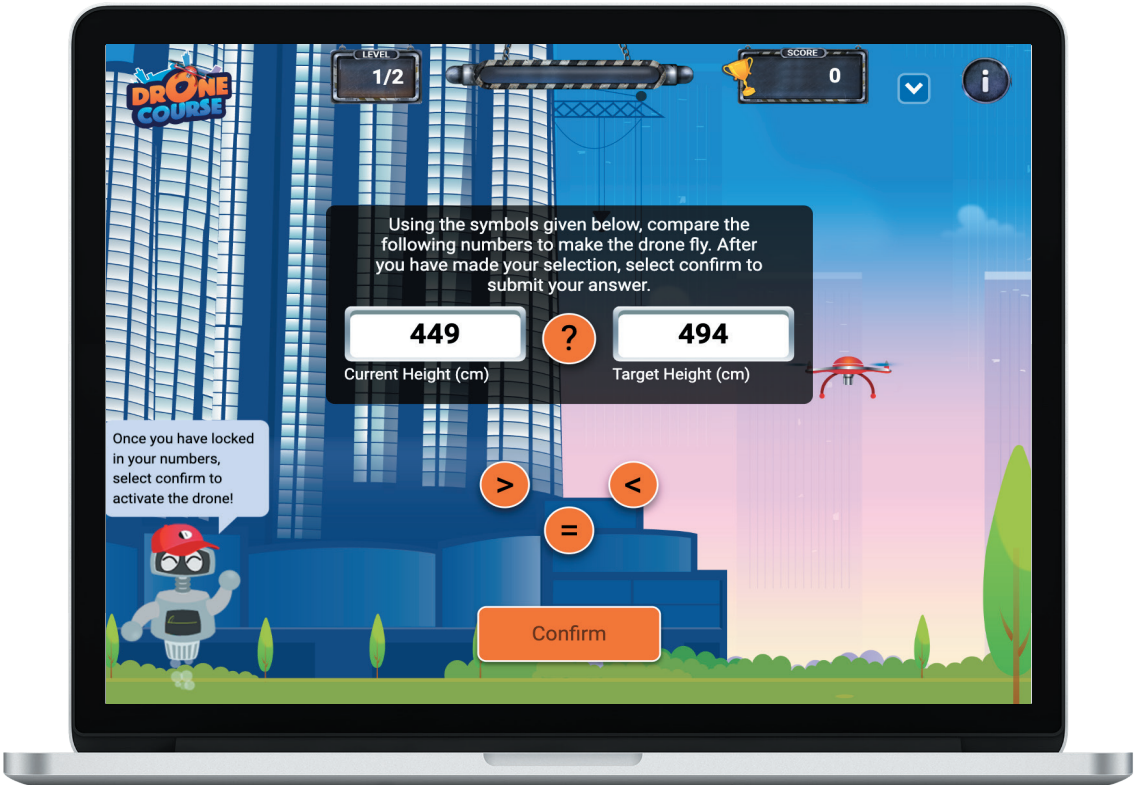
Name: Date:

Mayor que

¡Ganador!

INTERACTIVE PRACTICE - DRONE COURSE

Students practice skills that are aligned with the TEKS addressed in this lesson through engaging, fun games!



CAREER CONNECTIONS - WLADIMIR KOPPEN

Career Connections is meant to be an avenue that introduces your students to mathematical careers and the 21st Century Skills needed to succeed in those fields. These include, but aren't limited to, creativity and innovation, critical thinking, problem-solving, and technology skills. This scope highlights Wladimir Köppen, a climatologist.

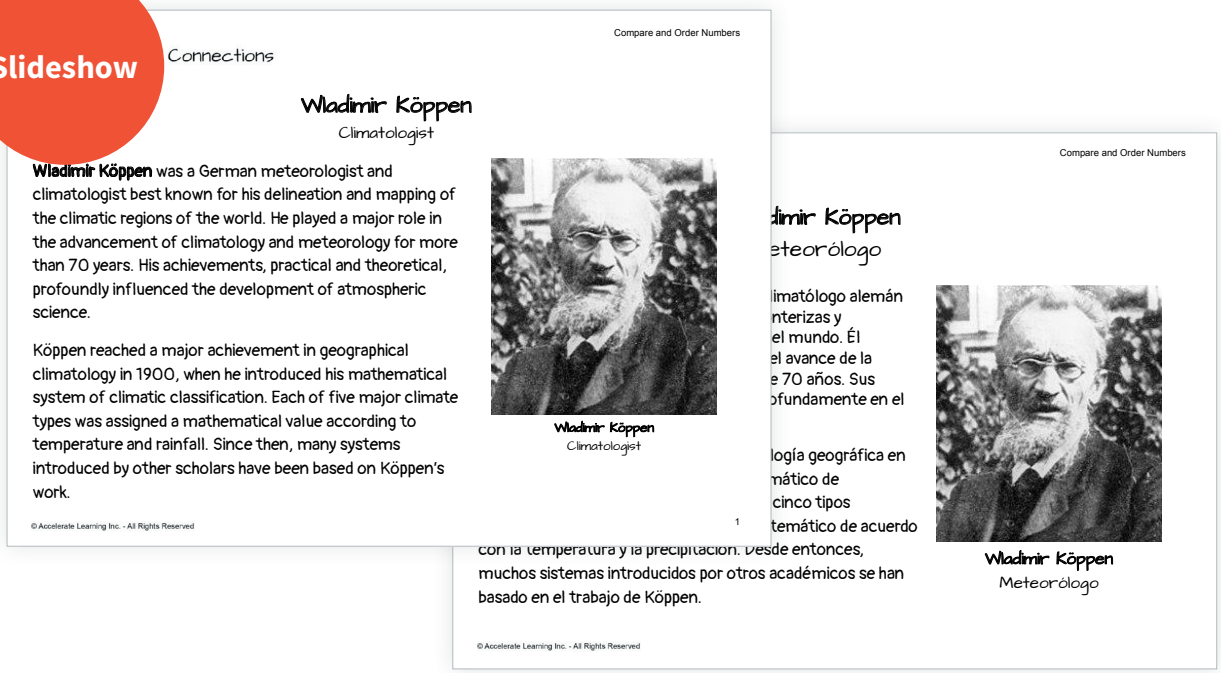
Preparation

- Group the students for rich collaboration and discourse.

Procedure and Facilitation Points

1. Project the slide and invite a student to read the biography of Wladimir Köppen.
2. Orchestrate a conversation with the students, asking questions such as the following:
   a. What career did Wladimir Köppen have?
   b. Thinking about what he accomplished, does it seem difficult or easy to use math in this way?
   c. Have you ever thought about math like this before?
   d. Why do you think this career is important for our everyday society?
   e. Is this a career you are interested in? Why or why not?
   f. How did Wladimir Köppen use critical-thinking skills?

Slideshow



SPIRALED REVIEW - FINDING JAX

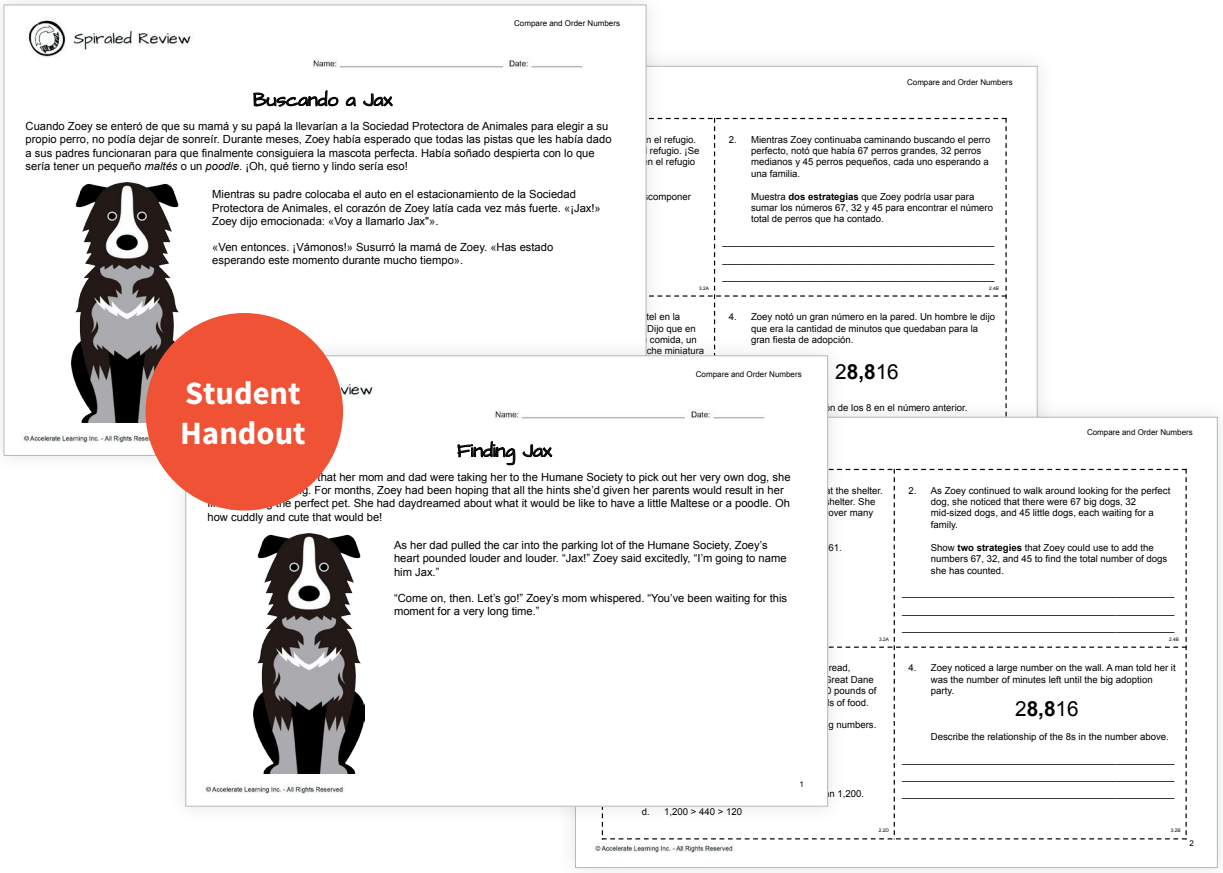
Students review previous or current grade-level content based on the focal points set for each grade.

Preparation

- Print a copy of the Spiraled Review handout for each student.

Procedure and Facilitation Points

1. You may need to provide reading assistance in order for some students to complete this activity.
2. Read the story on the first page to engage student interest before moving on to the questions.
3. Use this spiraled review as a warm-up in class, or send it home for homework, but be sure to discuss answers and strategies with the class as a whole group.
4. Refer to the standard in the lower right-hand corner of each question box to assess the students' content knowledge or need for further intervention.

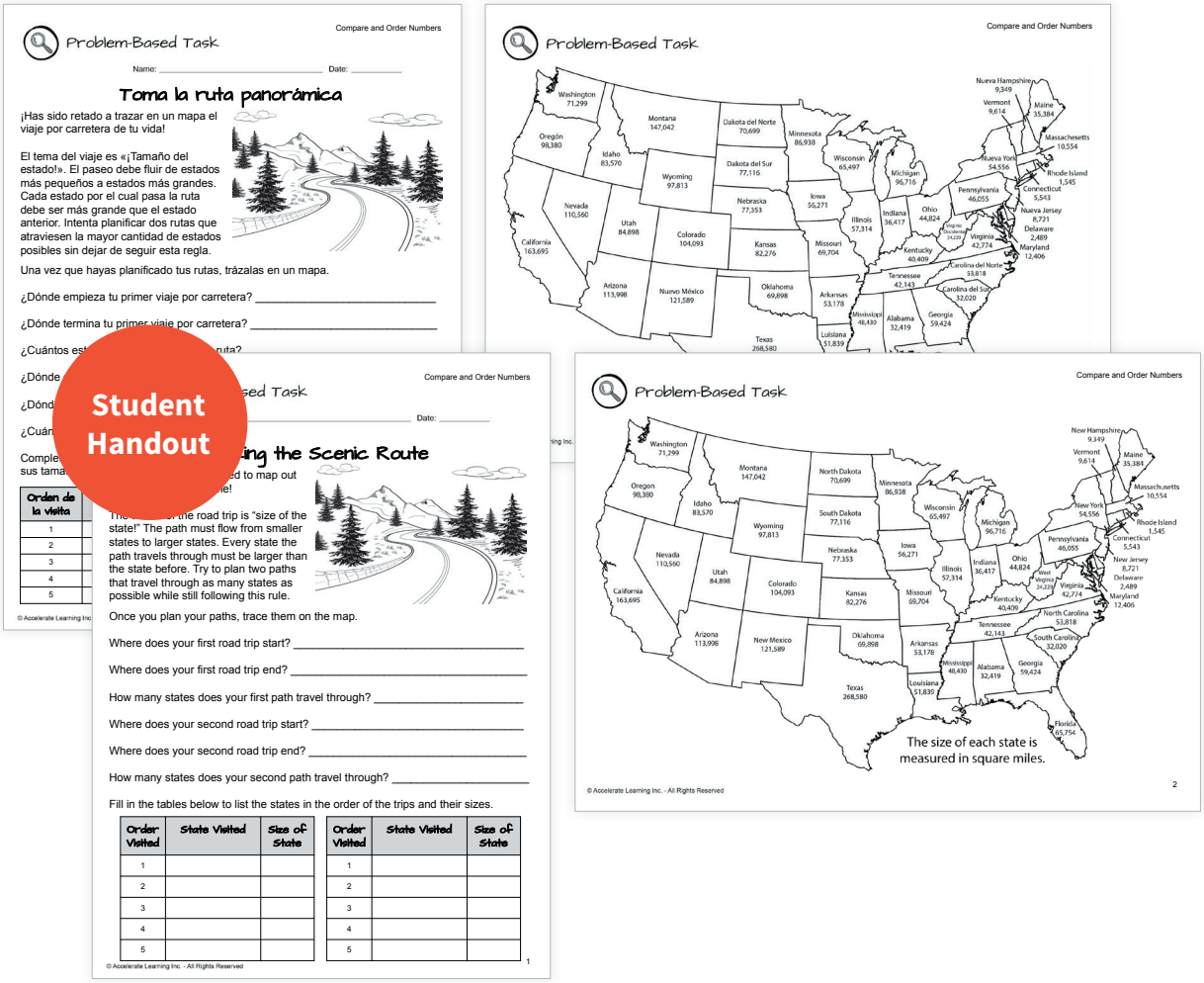


PROBLEM-BASED TASK - TAKING THE SCENIC ROUTE

Students work collaboratively to apply the knowledge and skills they have learned to an open-ended, real-world challenge.

Procedure and Facilitation Points

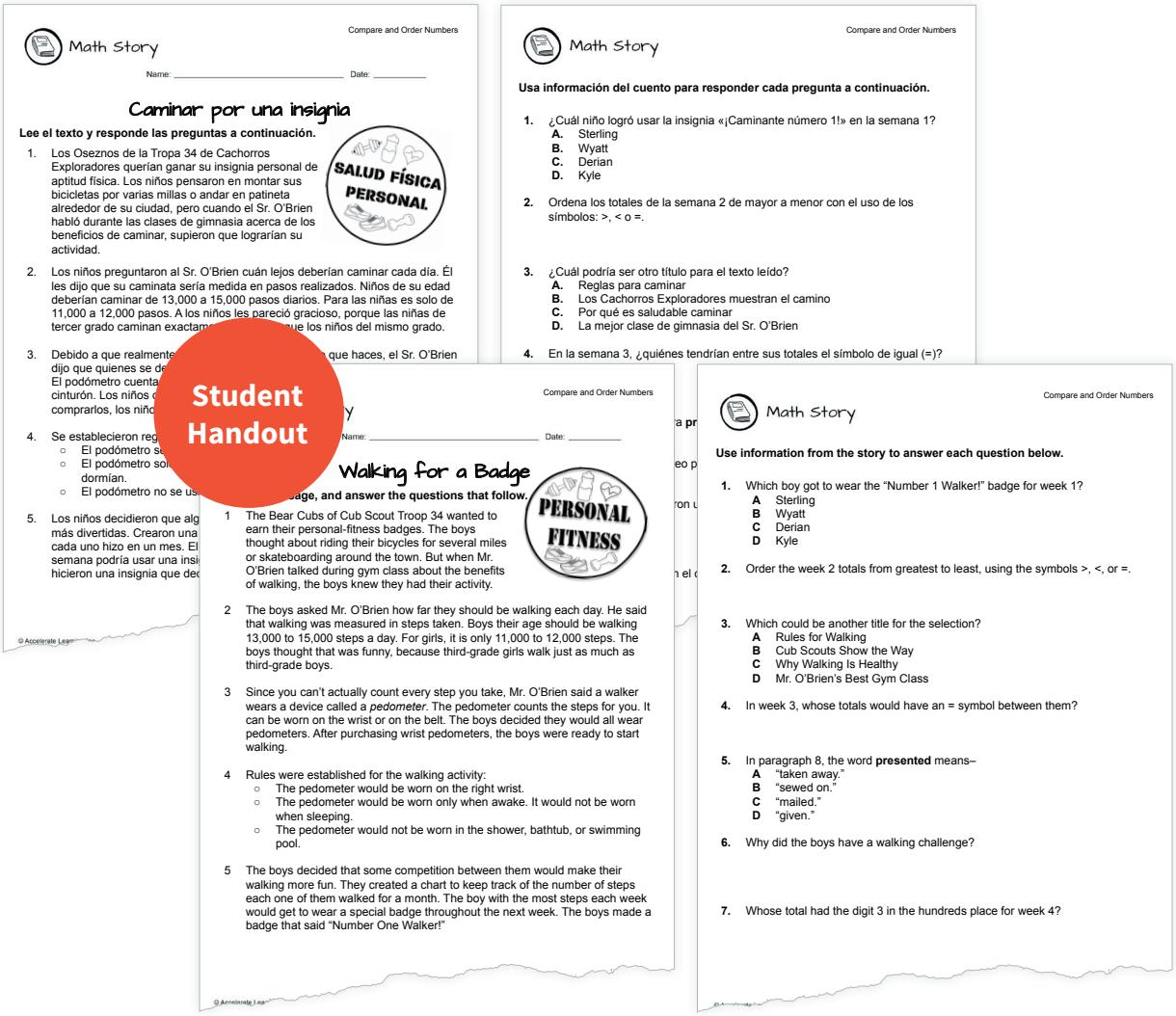
1. Allow students to work in groups.
2. Encourage students to look back at their Student Journals from the Explore activities if they need to review the skills they have learned.
3. If students are stuck, use guiding questions to help them think through it without telling them what steps to take next. If time permits, allow each group to share their solution with the class.
4. Discuss how different groups tackled the challenge in different ways.



MATH STORY - WALKING FOR A BADGE

Lexile® 670L

Read the passage, and answer the questions that follow.

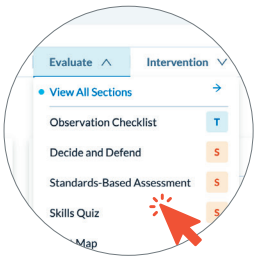


Evaluate

NAVIGATION STEPS

Click Evaluate

Click on Evaluate in the White Menu Bar



Review Content

Use the Dropdown to Review Evaluate Content

Assessments are intentionally integrated so that you can **evaluate** student progress and mastery. Collect data through TEKS-aligned assessments, along with student self-reflections and performance tasks.

OBSERVATION CHECKLIST

Diagnostic | Formative

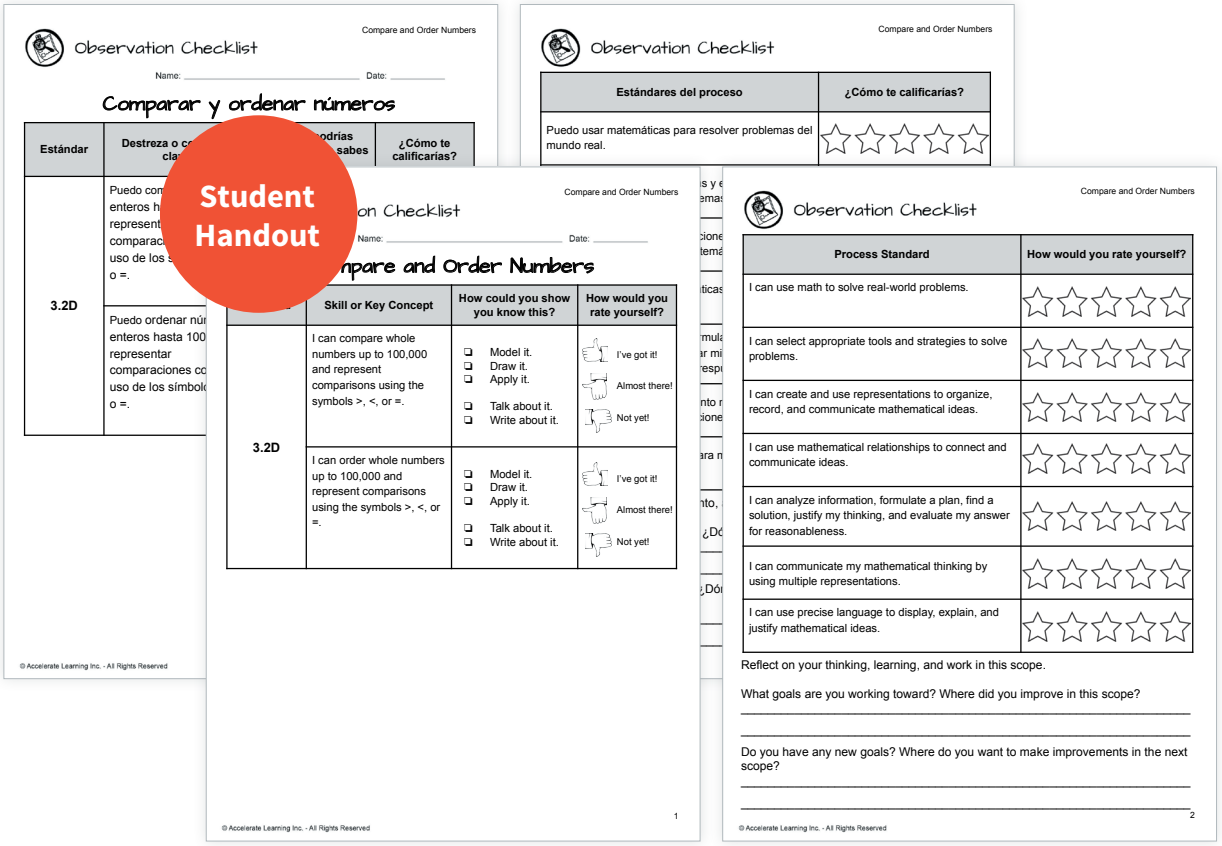
This element provides a breakdown of the key concepts and skills in the scope. It can be used as a formative assessment for teachers and as a self-assessment for students.

Preparation

- Print a Teacher Handout and Student Handout for each student.

Procedure and Facilitation Points

1. Distribute a Student Handout to each student.
2. As students are working through the Explore and Explain activities in the scope, formatively assess their progress by taking anecdotal notes on how key concepts and skills were observed. Reflection questions can be considered to measure the impact of whole-group and small-group activities.
3. Have students reflect on ways they can demonstrate their understanding and self-assess their progress on each key concept or skill as they work through both whole-group and small-group activities.
4. Students can reflect on their thinking, learning, and work in the scope; identify ways they have improved; and establish new learning goals.
5. Colleagues who provide instructional support to students can be equipped with the accommodations and modifications noted on the Teacher Handout.
6. Anecdotal notes provided on the Teacher Handout can be used as documentation for standards-based report cards.



DECIDE AND DEFEND

Formative

Decide and Defend is an open-ended assessment that prompts students to reason mathematically and support their ideas with evidence.

Student Handout

Compare and Order Numbers

cide and Defend

Name: _____ Date: _____

Stickers Galore!

Ranie and his friends have been collecting stickers for years. By third grade, Ranie had collected 89,478 stickers! He was sure he had collected more stickers than his friends. He asked them to count their stickers. The table shows the number of stickers in their collections.

Name	Stickers
Raquel	84,798
Jemmy	89,369
David	89,502

Ranie still thinks he has the greatest number of stickers. Is he correct? Explain your answer in the space provided.

Compare and Order Numbers

e and Defend

Name: _____ Date: _____

Calcomanías en abundancia!

s han coleccionado
ños. Para el tercer grado,
cionado 89,478
ba seguro de que había
calcomanías que sus
que contaran sus
bla muestra el número
sus colecciones.

Nombre	Calcomanías
Raquel	84,798
Jemmy	89,369
David	89,502

e tiene la mayor cantidad
Está en lo correcto?
a en el espacio provisto.

1

STANDARDS-BASED ASSESSMENT

Summative

Students demonstrate mastery of the key concepts and skills in the scope through a standards-based summative assessment.

Preparation

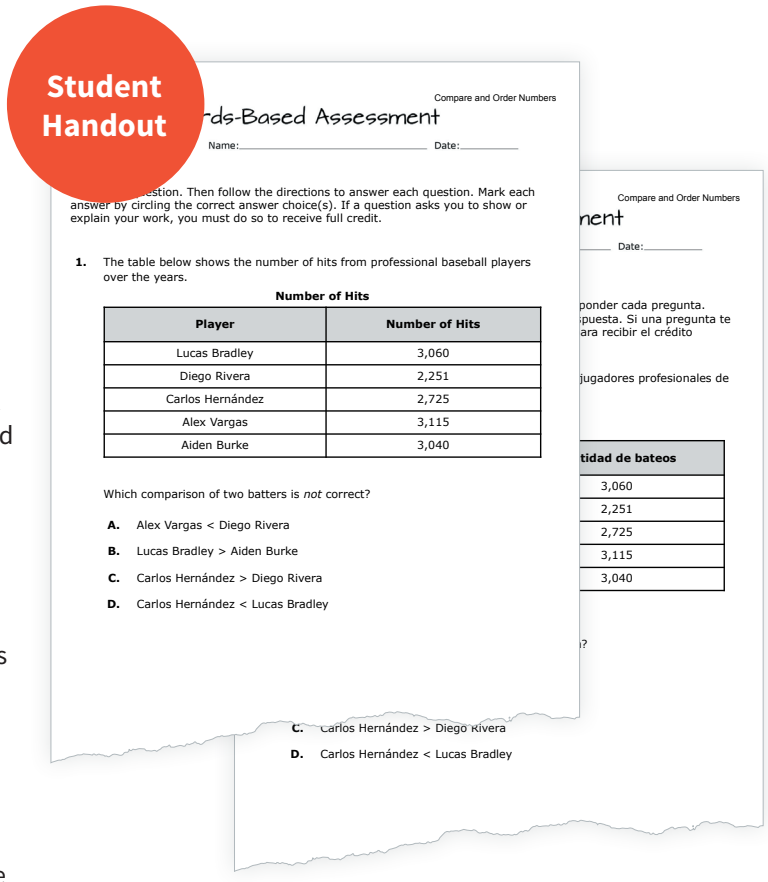
- Print a Student Handout for each student. The Student Handout can also be assigned digitally.
- Allow students to use manipulatives by request.
- Prepare Supplemental Aids for students who meet eligibility criteria.

Procedure and Facilitation Points

1. Distribute the Student Handout to each student.
2. Prompt students to show what they know in completing the assessment.
3. Allow students to reflect on their performances using the Heat Map.
4. Once student data has been collected after the assessment, refer to the Scaffolded Instruction Guide in the Home section of this scope to differentiate instruction for each student.

Tips and Tricks

- This element can be used as an assessment of learning and is intended to be assigned to students independently at their seats.
- Allow students to work with partners to review and rework problems they may have missed. Provide assistance as needed.
- The questions from this assessment can be found in the Assessment Bank and can be used to build a customized assessment.
- For test prep, print the Standards-Based Assessment, and cut out individual problems. Hang the problems along with chart paper around the classroom. Allow students to rotate through and solve each problem with partners. Challenge students to review the strategies already on the chart paper and use a different representation.
- The data from this assessment can be used to provide specific support and intervention.



SKILLS QUIZ

Formative Summative

Skills Quiz is a short, standards-based formative assessment to determine student mathematical fluency with the key concepts and skills in the scope.

Preparation

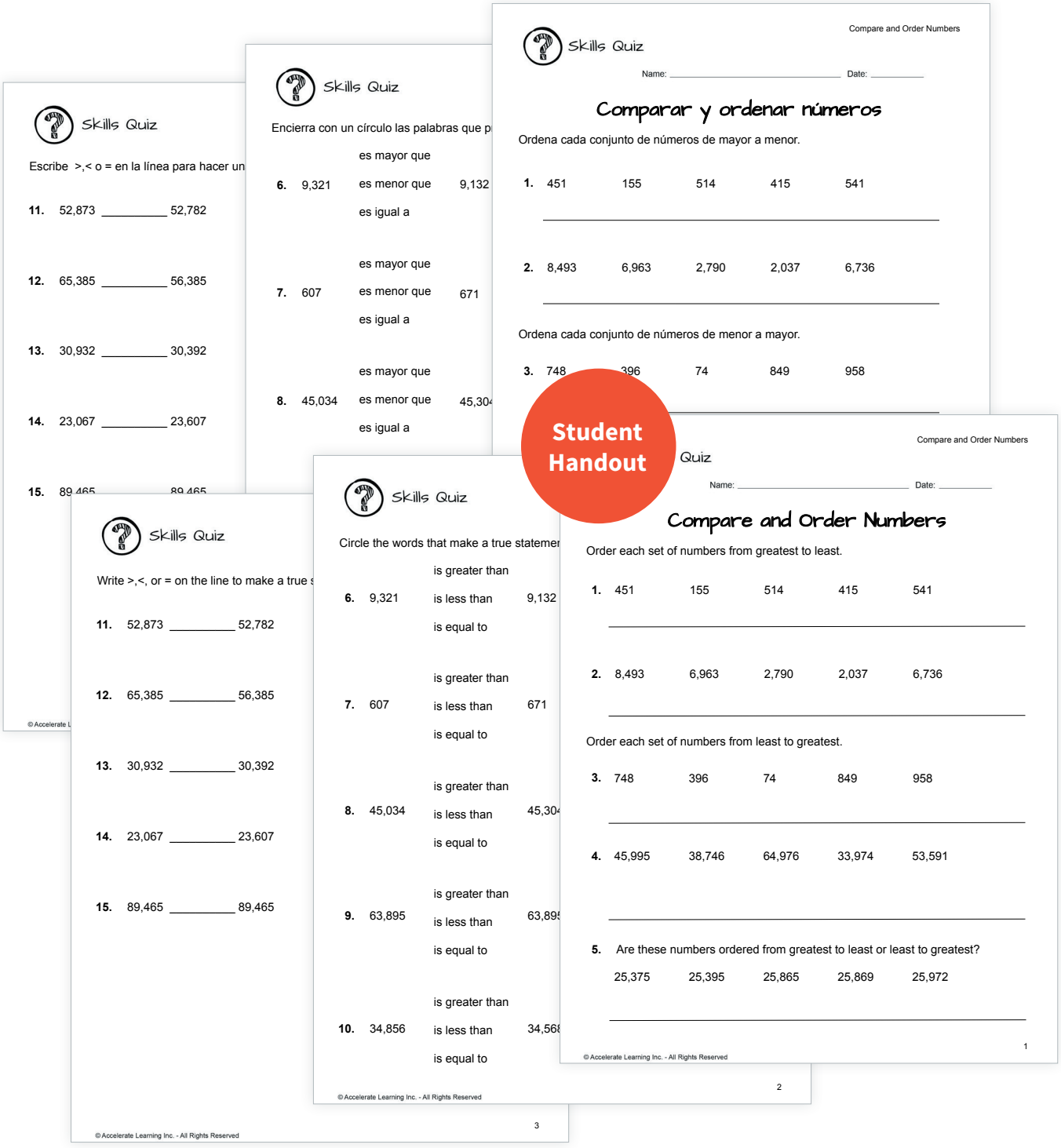
- Print a Student Handout for each student. The Student Handout can also be assigned digitally.
- Allow students to use manipulatives by request.
- Prepare Supplemental Aids for students who meet eligibility criteria.

Procedure and Facilitation Points

1. Distribute the Student Handout to each student.
2. Prompt students to show what they know in completing the assessment.
3. Allow students to reflect on their performances using the Heat Map.
4. Once student data has been collected after the assessment, refer to the Scaffolded Instruction Guide in the Home section of this scope to differentiate instruction for each student.

Tips and Tricks

- This element can be used as an assessment for learning and can be assigned to students to complete independently at their seats or as part of a workstation.
- This element is a perfect opportunity to have a one-on-one conference with each student to discuss their performance, and it can be used as a foundation for setting individualized goals.
- The data from this assessment can be used to provide specific support and intervention.
- A Skills Quiz from a previous unit can also be used as a spiral review.


Skills Quiz
Compare and Order Numbers
Name: Date:
Comparar y ordenar números
Ordena cada conjunto de números de mayor a menor.
1. 451 155 514 415 541
2. 8,493 6,963 2,790 2,037 6,736
Ordena cada conjunto de números de menor a mayor.
3. 748 396 74 849 958
Student Handout
Skills Quiz
Compare and Order Numbers
Name: Date:
Compare and Order Numbers
Order each set of numbers from greatest to least.
1. 451 155 514 415 541
2. 8,493 6,963 2,790 2,037 6,736
Order each set of numbers from least to greatest.
3. 748 396 74 849 958
4. 45,995 38,746 64,976 33,974 53,591
5. Are these numbers ordered from greatest to least or least to greatest?
25,375 25,395 25,865 25,869 25,972
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1
Skills Quiz
Circle the words that make a true statemer
6. 9,321 is greater than is less than is equal to 9,132
7. 607 is greater than is less than is equal to 671
8. 45,034 is greater than is less than is equal to 45,304
9. 63,895 is greater than is less than is equal to 63,895
10. 34,856 is greater than is less than is equal to 34,568
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2
Skills Quiz
Write >,<, or = on the line to make a true s
11. 52,873 _____ 52,782
12. 65,385 _____ 56,385
13. 30,932 _____ 30,392
14. 23,067 _____ 23,607
15. 89,465 _____ 89,465
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3
Skills Quiz
Escribe >,< o = en la línea para hacer un
11. 52,873 _____ 52,782
12. 65,385 _____ 56,385
13. 30,932 _____ 30,392
14. 23,067 _____ 23,607
15. 89,465 _____ 89,465
© Accelerate L
Skills Quiz
Encierra con un círculo las palabras que p
6. 9,321 es mayor que es menor que es igual a 9,132
7. 607 es mayor que es menor que es igual a 671
8. 45,034 es mayor que es menor que es igual a 45,304

HEAT MAP

Student Self-Reflection

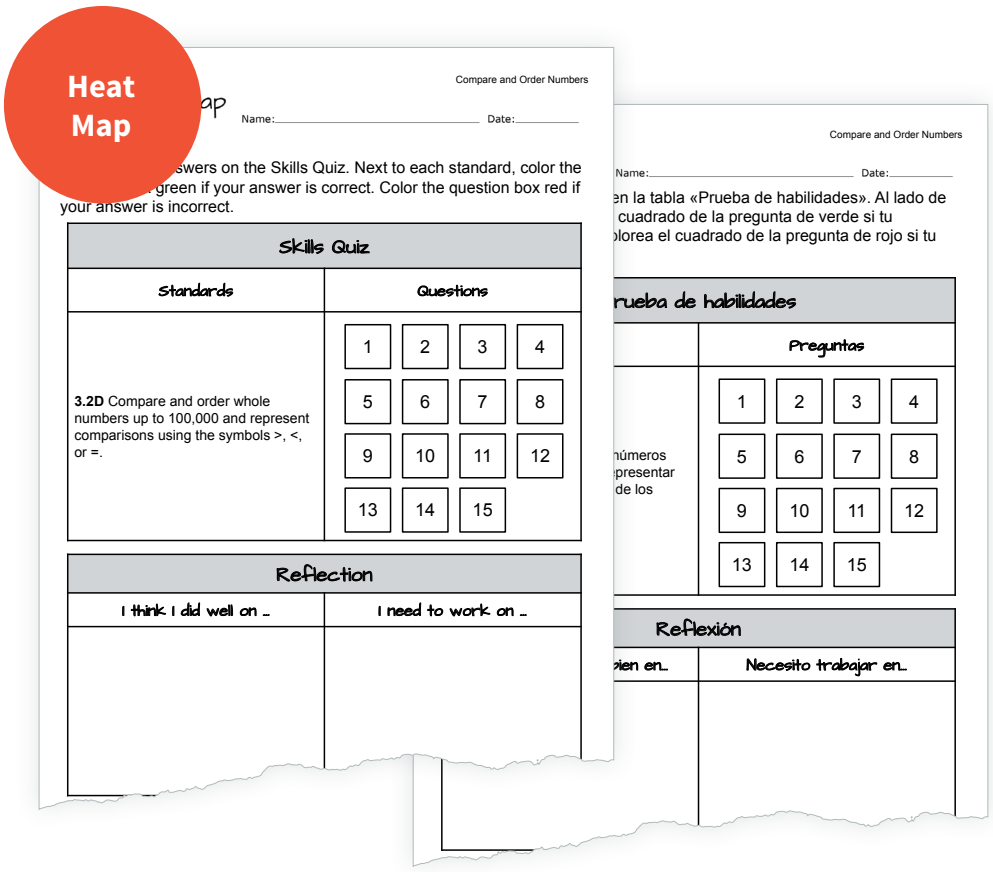
Students analyze their assessment results and determine what they did well and where they can improve.

Preparation

- Determine if students will analyze their Skills Quiz, Standards-Based Assessment, or both.
- Print a Heat Map for each student.
- Gather a red crayon and a green crayon for each student.

Procedure and Facilitation Points

1. Distribute a Heat Map to each student along with red and green crayons. Students should have their graded assessment(s) available.
2. Students use their graded assessment(s) to color-code the Heat Map. For each question answered correctly, students color the corresponding box green. For each question answered incorrectly, students color the corresponding box red.
3. Encourage students to look for patterns in their data, such as a certain standard that was missed more frequently or a standard they have clearly mastered, and use this information to reflect and set goals in the provided table.
4. Refer to the Scaffolded Instruction Guide found in the Home section to provide extension or additional support.



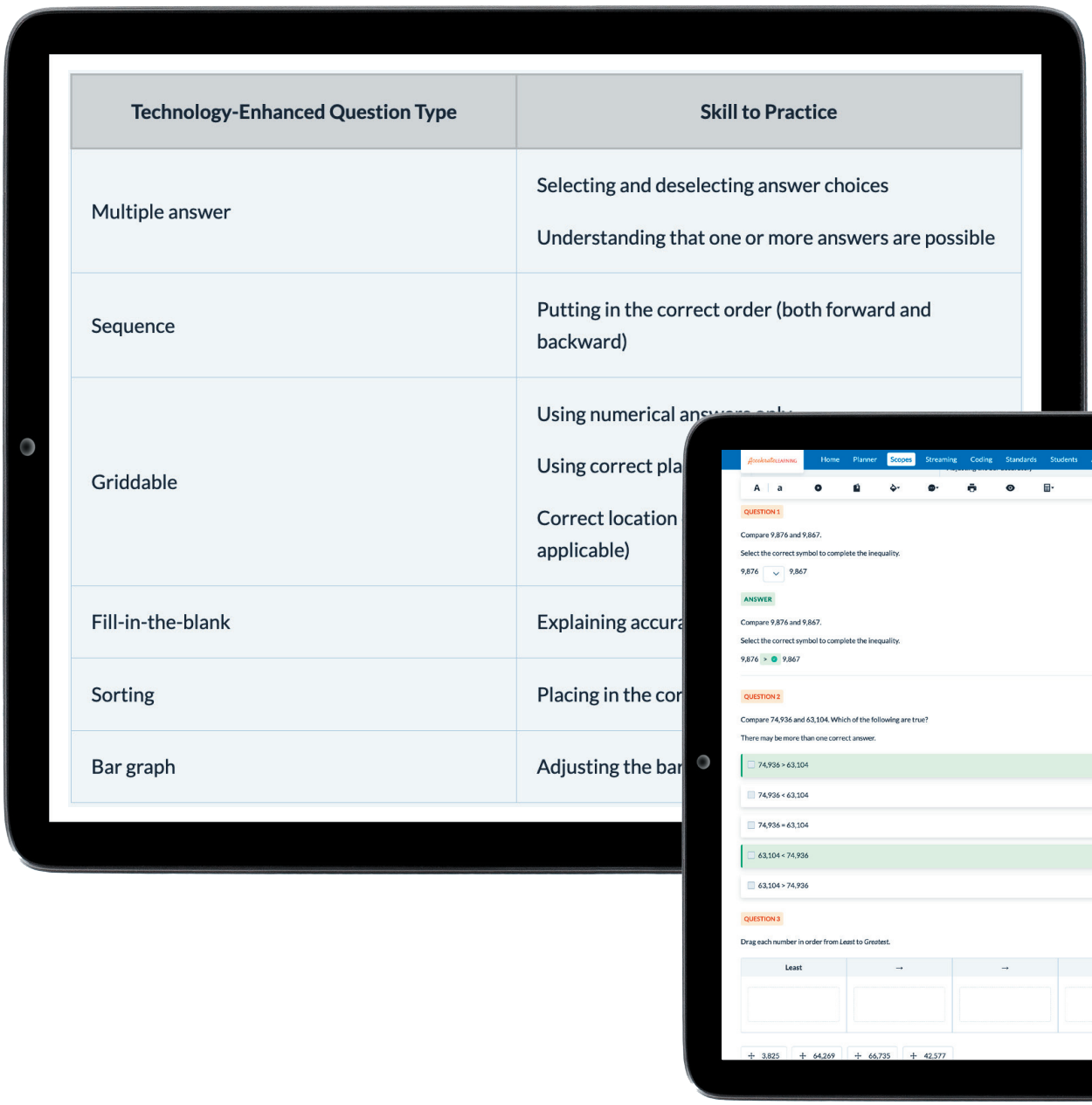
TECHNOLOGY-ENHANCED QUESTIONS

Summative

Technology-Enhanced Questions are designed to allow students to answer question types that are not possible in a paper/pencil format. These computer-based questions use formats that allow for non-conventional question types, including multiple answer, sequence, griddable, fill-in-the-blank, sorting, and bar graph.

Procedure and Facilitation Points

1. Students work individually to complete the questions digitally. This assessment is only available in a computer-based format. Assign students to the assessment before they begin so the system captures their responses and produces data on their performances.



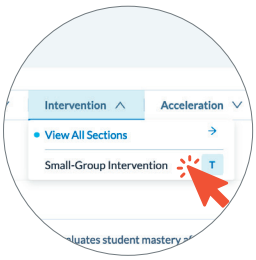
Technology-Enhanced Question Type	Skill to Practice
Multiple answer	Selecting and deselecting answer choices Understanding that one or more answers are possible
Sequence	Putting in the correct order (both forward and backward)
Griddable	Using numerical ans Using correct pla Correct location applicable)
Fill-in-the-blank	Explaining accura
Sorting	Placing in the cor
Bar graph	Adjusting the bar

Intervention

NAVIGATION STEPS

Click Intervention

Click on Intervention in the White Menu Bar



Review Content

Use the Dropdown to Review Intervention Content

Unleash the power of hands-on learning to provide targeted instruction and tackle conceptual misunderstandings head-on! Perfect for **intervention**, re-teaching, or test preparation, these dynamic resources are your go-to tools for transforming math challenges into triumphs in the classroom.

SMALL-GROUP INTERVENTION

Students compare and order numbers up to 100,000 by using various representations and the comparison symbols <, >, and =.

Preparation

- Plan for students to work in pairs.
- Print a Teacher Checklist.
- Print a Checkup for each student.

Part I

- Locate the work mats, and print Place Value Mat I (page 1). Laminate or place it in a sheet protector to use with a dry-erase marker.
- Gather place value disks for each pair of students.
- Gather a dry-erase marker for each student.

Part II

- Locate the work mats, and print Place Value Mat II (page 2) and Number Line (page 3). Laminate or place each page in a sheet protector to use with a dry-erase marker.
- Gather place value disks for each pair of students.
- Gather a dry-erase marker for each student.

Procedure and Facilitation Points

Part I: Compare Numbers

1. Place students in pairs.
2. Ask students to share what they know about comparing numbers. Allow students a few minutes to discuss with their partners before sharing with the group.
3. Distribute the place value disks to each pair of students. Prompt students to build a number between 24,000 and 27,000 using place value disks. Ask the following questions
   a. What number did you create? *Answers will vary: 25,235*
   b. What is the value of each digit? *There are 2 ten thousands, so the value of the 2 in the ten thousands place is 20,000. There are 5 thousands, so the value of the 5 in the thousands place is 5,000. There are 2 hundreds, so the value of the 2 in the hundreds place is 200. There are 3 tens, so the value of the 3 in the tens place is 30. There are 5 ones, so the value of the ones place is 5.*
4. Distribute Place Value Mat I from the work mats and a dry-erase marker to each student.
5. Instruct students to use their dry-erase markers to represent the number they built with place value disks and write the digit represented by each place value on the top row of their Place Value Mat. Students can use circles to represent the place value disks in each place value.
6. Repeat this process with a new number, and record it in the second row of the Place Value Mat.

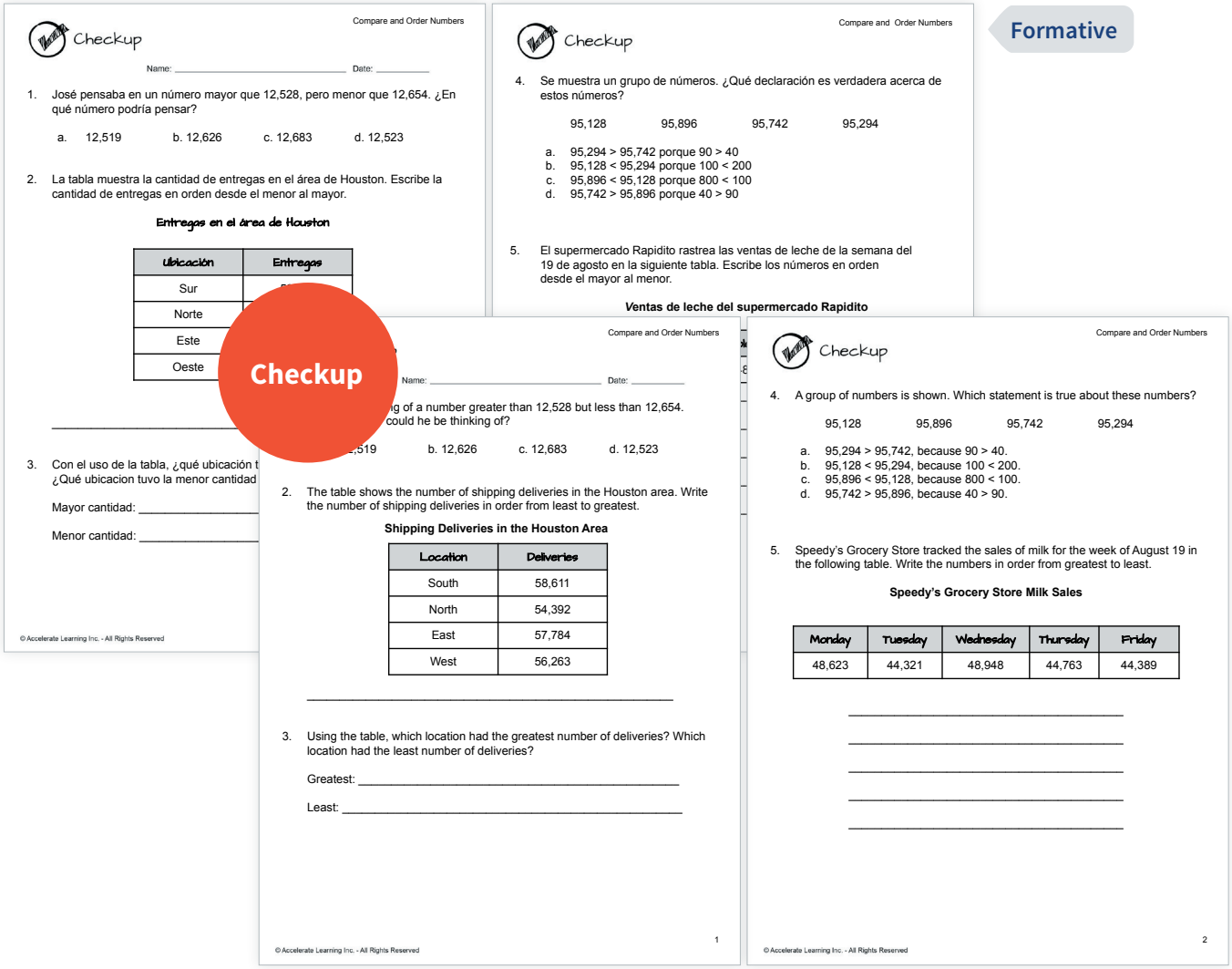
7. Discuss the numbers students built. The questions and sample answers are listed as if the second number generated is 26,341.
    a. What do you notice about these two numbers? *Answers will vary. They are both five-digit numbers. They both have 2 ten thousands. There are more thousands in 26,341 than 25,235. Six thousands is greater than five thousands. There are more hundreds in 26,341 than in 25,235. Three hundreds is greater than 2 hundreds. There are more tens in 26,341 than in 25,235. Four 10s is greater than three 10s. There are more ones in 25,235 than in 26,341. Five is greater than one.*
    b. Look at the ten thousands place. Can the digits in this place value help us determine which number is greater? *No. Both numbers have a 2 in the ten thousands place, so the value of the ten thousands place is equal in both numbers.*
    c. Look at the thousands place. Can the digits in this place value help us determine which number is greater? *Yes. The first number has five thousands, and the second number has six thousands. Six thousands is greater than five thousands, so the second number is the greater number.*
    d. How can we describe the relationship between the two numbers? *26,341 is greater than 25,235.*
    e. There are more ones in 25,235 than 26,341. Does this matter when determining which number is greater? *No. Because the numbers have different amounts of thousands, we can use the thousands place to compare them. The smaller place values don't matter in this comparison.*
    f. What if the two digits in the thousands, hundreds, and tens place were the same? *Then we would look at the next place value, which is the ones place.*
    g. What process can you use to compare numbers? *I compare the numbers in the greatest place value and see which digit has the greatest or least value.*
8. Prompt students to record the comparison using the proper symbol on their Place Value Mat. Be sure to use the correct language when reading the symbol, such as "greater than" and "less than."
9. Repeat this process with other pairs of numbers less than 100,000.

Part II: Order Numbers

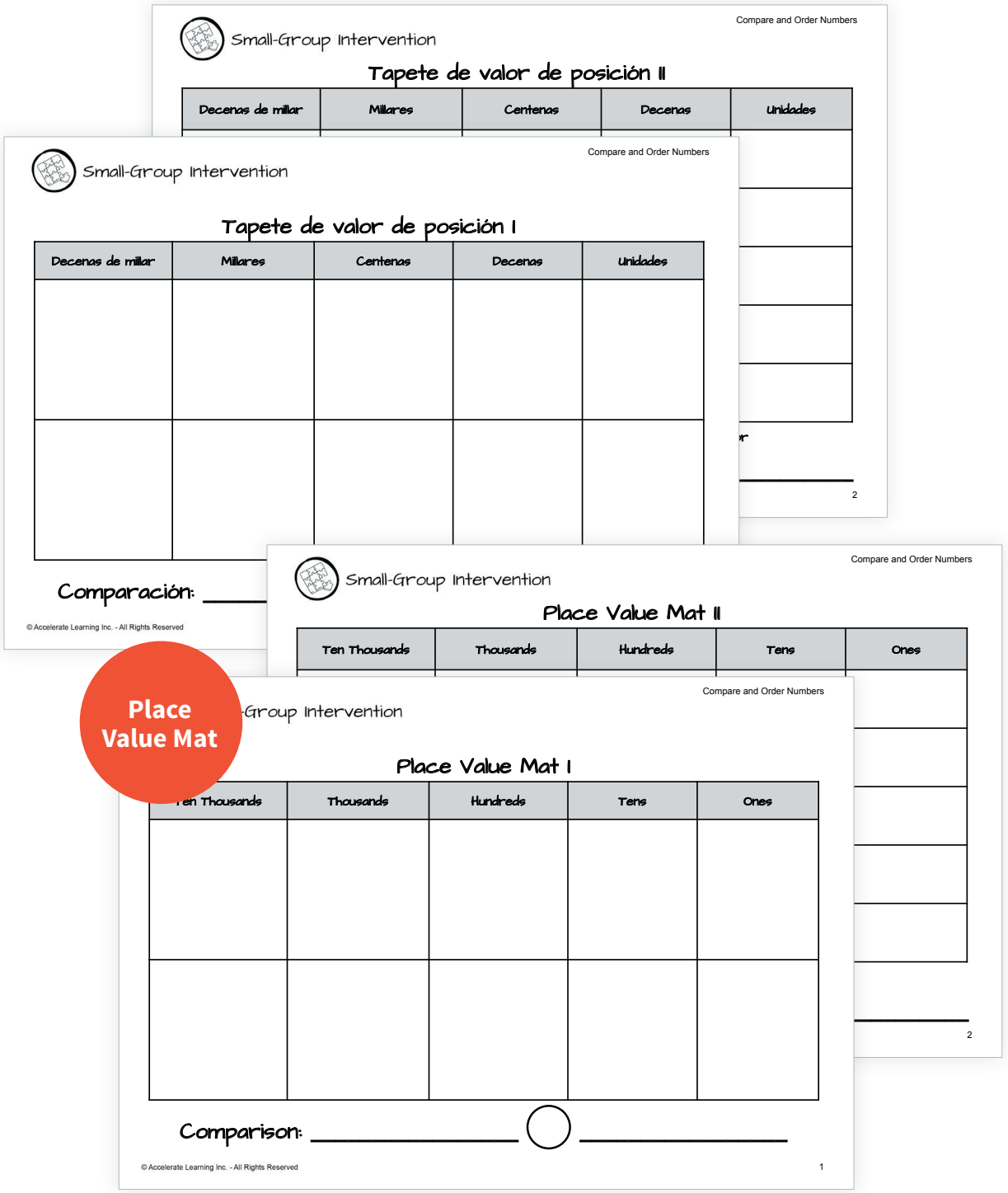
1. Place students in pairs.
2. Ask students what they know about ordering numbers. Allow students to share their knowledge with the group. Ask the following questions:
    a. What do you have to do to be able to order numbers? *We have to compare the numbers we are ordering.*
    b. How do you compare numbers? *We start with the highest place value first. We look at the digits to see if they are different. If they are the same, we look at the next-highest place value to see if those digits are different. We keep moving one place value to the right until we find digits that are different.*
    c. Describe a process you could use to compare numbers by using the number line. *We could place the numbers on the number line. If a number is farthest to the right, it is the greatest. If the number is farthest to the left, it is the least.*
3. Distribute Place Value Mat II from the work mats and a dry-erase marker to each student. Distribute the place value disks to each pair.
4. Instruct students to write the following numbers on their Place Value Mats using their dry-erase markers: 77,978, 92,539, 71,552, 83,441, and 83,435. Students should build one place value at a time as it is discussed, beginning with the ten thousands place.
    a. In which place value do you start to determine which of these numbers is greatest? *I start by looking at the ten thousands place.*

5. Prompt students to build the ten thousands place with place value disks for each number.
    a. Can the ten thousands place help us order the numbers? How do you know? *The number 92,539 is greatest because when I look at the ten thousands place in all the numbers, the digits are a 9, an 8, and a 7, and it is the only number with a 9 in the ten thousands place. I know 90,000 is greater than 80,000 and 70,000. Therefore, 92,539 is the greatest number.*
6. Have students write a G for greatest next to 92,539. Students then circle "greatest to least" on their Place Value Mat and record this number as first in the list.
    a. What else can you determine about the order of the numbers from the ten thousands place? *The numbers that have an 8 in the ten thousands place will be in the middle of the order. Those numbers will not be the greatest or the least. There are two numbers that have 7 ten thousands, so either of those could be the least number.*
7. Prompt students to build the thousands place with place value disks for the remaining numbers.
    a. Can the thousands place help us order the numbers? How do you know? *I see 77,978 has a 7 in the thousands place and 71,552 has a 1 in the thousands place. I know that 1 thousand is less than 7 thousand, so 71,552 is less than 77,978. This means 71,552 is the least number.*
8. Have students write an L for least next to 71,552. Students then record this number as last in the list on their Place Value Mat. It may be helpful to draw lines or boxes as placeholders for the numbers that will be listed in between the greatest and least numbers.
    a. What else can you determine about the order of the numbers based on the place values we have built? *Only one other number has a 7 in the ten thousands place, so it must be listed right before the least number. The other two numbers have an 8 in the ten thousands place and a 3 in the thousands place, so those values are equal right now.*
9. Have students record 77,978 before 71,552 in the list on their Place Value Mat.
10. Prompt students to build the hundreds place with place value disks for the remaining numbers.
    a. Can the hundreds place help us order the numbers? How do you know? *I see both numbers have 4 hundreds, so those values are still equal.*
11. Prompt students to build the tens place with place value disks for the remaining numbers.
    a. Can the tens place help us order the numbers? How do you know? *I see 83,441 has four 10s and 83,435 has three 10s. Because 30 is less than 40, I know 83,435 is less than 83,441.*
    b. How could you add these numbers to your list? *I now know that 83,441 is the second-greatest number and should be listed after the greatest number. Then I would list 83,435 after it.*
12. Distribute the Number Line work mat.
13. Instruct students to label the tick marks on the first number line. Students can start with 70,000 and count by five thousand up to 95,000. (The tick marks will be labeled 70,000, 75,000, 80,000, 85,000, 90,000, and 95,000.)
14. Using the Number Line, have students plot and label each of the numbers written on Place Value Mat II. Guide students as needed to ensure all points are placed correctly. Encourage students to reflect on the highest place values they modeled and how that may help them place the numbers on the Number Line.

15. Discuss the following questions:
    a. Which point is farthest to the left? 71,552 What does that mean? *It is the least number.*
    b. Which point is farthest to the right? 92,539 What does that mean? *It is the greatest number.*
    c. How could we use the Number Line to order these numbers from least to greatest? *We will start with the farthest number on the left and then list them in the same order they are placed on the Number Line, from left to right.*
    d. How does this list compare to the list you created with the Place Value Mat? *On the Place Value Mat, we listed the numbers in order from greatest to least. On the Number Line, the numbers are in order from least to greatest from left to right. The order is reversed, but the relationships between the numbers are still the same.*
16. Repeat the activity with other sets of numbers less than 100,000, addressing misconceptions or errors as they arise. Students write and order the numbers on the Place Value Mat and the Number Line. Be sure to emphasize that both tools can be used to analyze the place values of the numbers and place them in order.
17. Afterward, allow time for students to complete the Checkup individually.



SUPPLEMENTAL AIDS - PLACE VALUE MAT

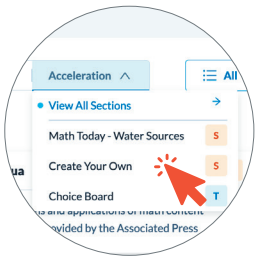


Acceleration

NAVIGATION STEPS

Click Acceleration

Click on Acceleration in the White Menu Bar



Review Content

Use the Dropdown to Review Acceleration Content

Acceleration activities allow students to dive deeper into the content and its applications, enhancing their understanding and engagement. These enrichment activities are designed for all students, providing opportunities to explore advanced concepts and develop critical thinking skills.

CHOICE BOARD

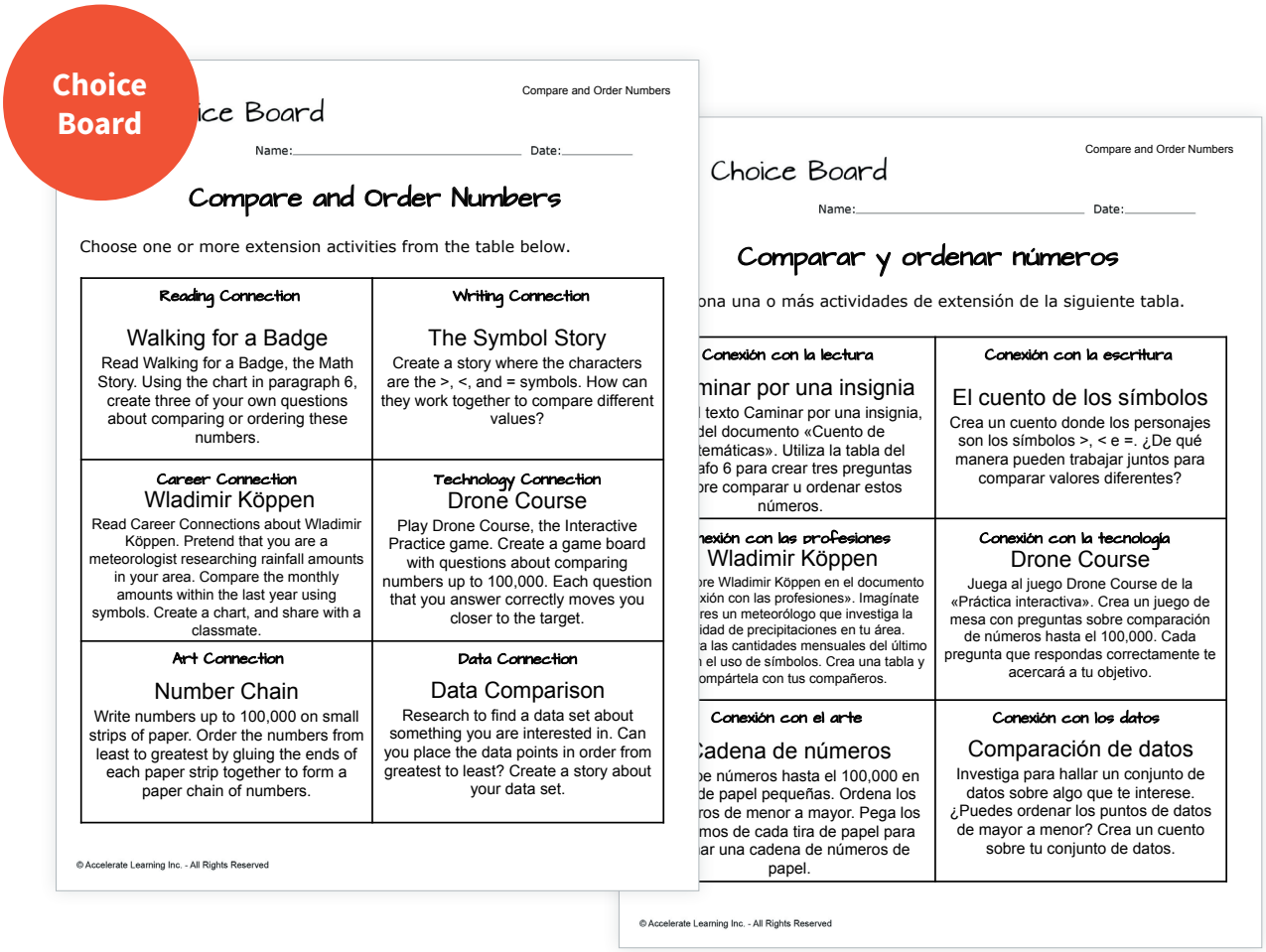
Students explore real-world connections and applications of math content through interactions with engaging activities.

Preparation

- Print a Choice Board for each student.
- Plan ahead for technology use. Access to other activities within the scope may be required for some options on the Choice Board.
- This activity can be completed in class or at home.

Procedure and Facilitation Points

1. Distribute a Choice Board to each student.
2. Allow students time to examine the Choice Board and select the activities they would like to explore.
3. Encourage students to attempt at least three activities on the Choice Board.
4. If time allows, have students share the connections they made in completing the activities they chose.

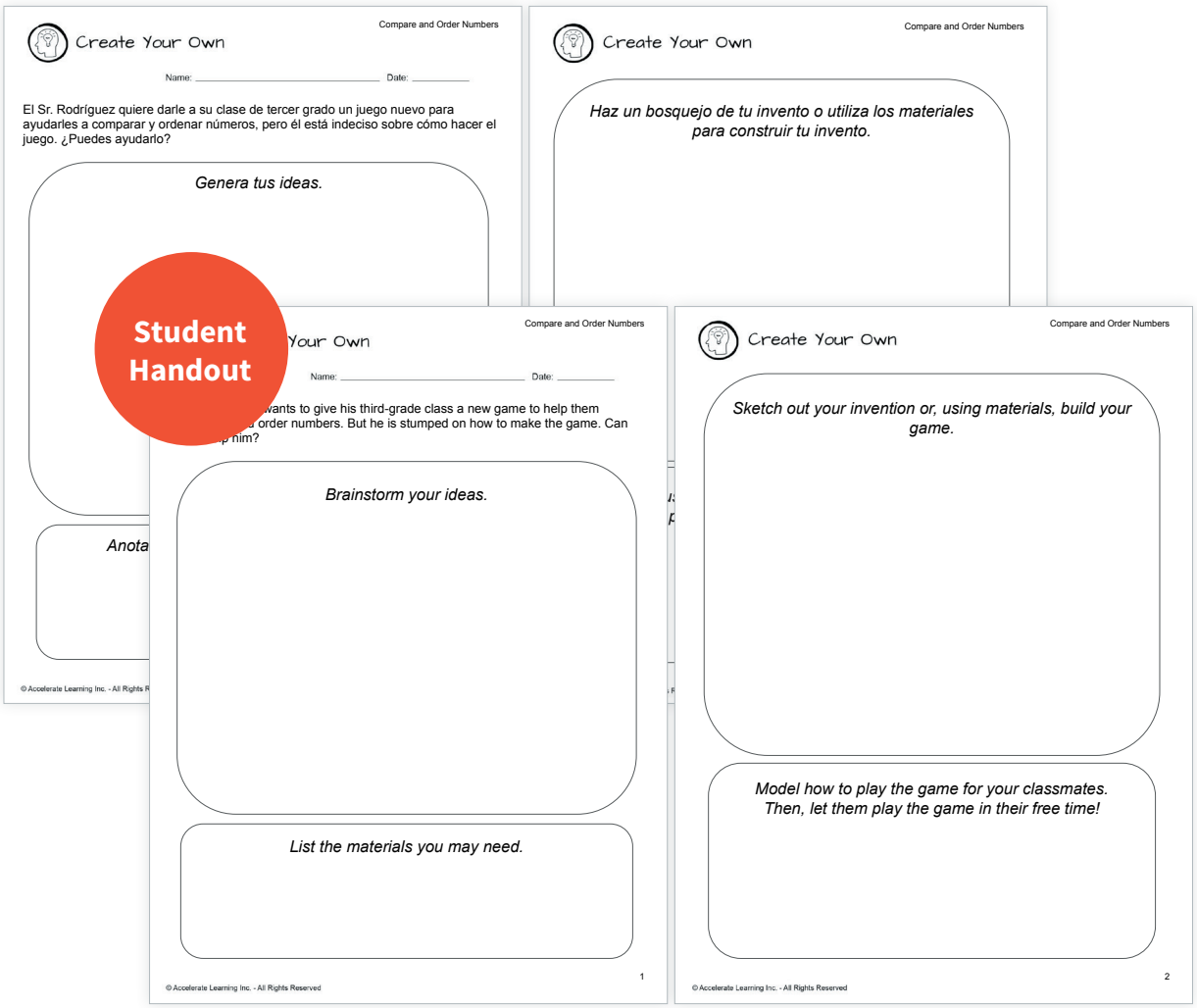


CREATE YOUR OWN

Create Your Own is an enriching activity for students to be able to create their own inventions, plays, songs, technology apps, and more!

Procedure and Facilitation Points

1. Distribute a Create Your Own student handout to each student.
2. Allow time for them to be as creative as possible! There is no boundary to their creativity on this activity.
3. Invite each student to present or perform his or her creative product to the class or small group.



MATH TODAY - WATER SOURCES

Students will explore connections and applications of math and other cross-curricular content through interactions with authentic, real-world events.

Procedure and Facilitation Points

1. Allow students to view the video.

Scan and Watch the Video

2. Discuss:
   a. Let students share with "I notice . . ." and "I wonder . . ." statements. Ask students how math is used in this situation.
   b. How many gallons are they able to produce each hour? *They can produce 1,000 gallons an hour.*
   c. How can the operators of the desalination plant make sure they are producing enough water for the people in their area? *They would need to add up how many gallons they are able to produce per day and how many gallons are used in that area per day.*
3. Students should complete the student page independently or with a partner.

Student Handout

Math Today

Compare and Order Numbers

Name: _____ Date: _____

Water Sources

Operators at a desalination plant are producing drinkable water from ocean water. Each day, they are able to produce a certain amount of drinking water for their area.

1. The chart shows the amount of water they produced each day this week.

   On which day did they produce the most water? _____

	Monday	Tuesday	Wednesday	Thursday	Friday
Gallons of Water	9,430	18,500	12,700	12,490	16,300

2. Compare the amount of water produced on Wednesday and Thursday to complete the sentence below. Circle the words that make the sentence true.

   _____ is (greater than / less than) _____

   Wednesday Thursday

3. Put the numbers of gallons produced per day in order from least to greatest.

   _____ _____ _____ _____ _____

Compare and Order Numbers

_____ Date: _____

de agua

s operadores de una planta de salinización producen agua potable a tir del agua del océano. Cada día pueden ducir una cierta cantidad de agua potable ra su área.

a que producen cada día de la semana.

ad de agua? _____

Miércoles	Jueves	Viernes
12,700	12,490	16,300

cida el miércoles y el jueves para Encierra en un círculo las palabras que

nor que) _____

el jueves

idos por día en orden desde el menor al mayor.

_____ _____ _____ _____ _____

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