Comparing/Ordering of Whole Numbers

Lesson Synopsis:

This lesson will focus on the conceptual understanding of place value through the use of concrete manipulatives, representing whole numbers up to 999 in multiple ways, creating and locating whole numbers on a number line up to 100, and comparing and ordering whole numbers using place value and number lines.

TEKS:

2.1		*Number, operation, and quantitative reasoning. The student understands how place value is used to represent whole numbers. The student is expected to use concrete models to represent, compare, and order whole numbers (through 999), read the numbers, and record the comparisons using numbers and symbols (> , < , =).*
	2.1A	Use concrete models of hundreds, tens, and ones to represent a given whole number (up to 999) in various ways.
	2.1B	Use place value to read, write, and describe the value of whole numbers to 999.
	2.1C	Use place value to compare and order whole numbers to 999 and record the comparisons using numbers and symbols (<, =, >).
2.5		*Patterns, relationships, and algebraic thinking. The student uses patterns in numbers and operations.*
	2.5B	Use patterns in place value to compare and order whole numbers through 999.
2.8		*Geometry and spatial reasoning. The student recognizes that a line can be used to represent a set of numbers and its properties.*
	2.8	Use whole numbers to locate and name points on a number line.

Process TEKS:

2.12		*Underlying processes and mathematical tools. The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school.*
	2.12A	Identify the mathematics in everyday situations.
	2.12C	Select or develop an appropriate problem-solving plan or strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem.
2.13		*Underlying processes and mathematical tools. The student communicates about Grade 2 mathematics using informal language.*
	2.13A	Explain and record observations using objects, words, pictures, numbers, and technology.
	2.13B	Relate informal language to mathematical language and symbols.
2.14		*Underlying processes and mathematical tools. The student uses logical reasoning.*
	2.14	Justify his or her thinking using objects, words, pictures, numbers and ~~technology~~.

GETTING READY FOR INSTRUCTION

Performance Indicator(s):

- Read, write, and describe the concrete representation of a given number and apply those representations interchangeably. (2.1A, 2.1B)
  - **ELPS** ELPS: 1E, 2E, 2I, 3D, 3H, 4E, 5B, 5G
- Symbolically represent the comparison of whole numbers and justify reasoning through the application of place value patterns (2.1C; 2.5B)
  - **ELPS** ELPS: 1E, 2E, 2I, 3D, 3H, 4E, 5B, 5G
- Use the location of whole numbers on a number line to compare and order whole numbers up to 999. (2.8)
  - **ELPS** ELPS: 1E, 2E, 2I, 3D, 3H, 4E, 5B, 5G

Key Understandings and Guiding Questions:

- Concrete models can represent numbers that can be read, written, and described.
  — How can base-ten blocks represent the value of numbers (through 999)?
  — Can you represent a three-digit number with a different arrangement of base-ten blocks (i.e. two tens and twenty ones)?
  — Can you represent a three-digit number in more than one way?
  — What does the pictorial, place value notation, expanded notation, written, and numeric representations of a three-digit number represent?
  — What are the similarities and differences between the pictorial, place value, expanded notation, written, and numeric representations of three-digit whole numbers?
- Place value patterns relate to comparing/ordering of numbers.
  - *Numbers can be compared and ordered using place value.*
  — What place value in a three-digit number do you look at first to determine which is greater or smaller?
  — What place value in a three-digit number do you look at second to determine which is greater or smaller?
  — What place value in a three-digit number do you look at last to determine which is greater or smaller?
- Symbolic representation of (<, >, =), mathematically communicate the comparison of two numbers.
  - *Symbols can be used to compare the value of two numbers.*
  — What words do the mathematical symbols <,>, = communicate?
  — What does it mean to be greater than, less than, or equal to something?
  — What are the similarities/differences between two statements that communicate the same comparison? (i.e. 423 < 467 and 467 > 423)
- A number line can be used to represent a set of numbers.
  — How is the number line used as a tool to help determine if a number is greater than or less than another number?
- Points on a number line can be named using numbers.
  — How does place value help determine the location of a number on the number line?

Vocabulary of Instruction:

- base-ten language (100- flat, 10- long, unit)
- place value
- number line
- greater than
- less than
- equal

Materials:

- tape (1 roll)
- counters (10 per pair)
- base-ten blocks (1 set per pair)
- math journals (or blank paper)
- dry erase boards (if available)
- dry erase markers (if available)
- butcher paper (5 pieces)
- decahedra dice (1 per student pair)
- string/rope/adding machine tape (1 long piece for use across the front wall)
- adding machine tape (2 desktop size pieces per student)
- clothespins (22)
- paper clips
- index cards (22)
- glue
- scissors (1 per student)
- sticky dots

Resources:

- **STATE RESOURCE:** TEXTEAMS: Rethinking Elementary Mathematics Part 1: Make It Zero Base-ten Block Version
- **SPIRALING REVIEW**
  A new lesson component, Spiraling Review, will be introduced with this lesson. It is designed to provide a spiraling review of previously introduced concepts. It is recommended that students be given 5 – 6 minutes to complete the daily questions using their math journals. Approximately four minutes should be used for discussion. Two days of each week are called "Fact Time" and are devoted to developing quick recognition of basic addition and subtraction fact families. Teachers may use supplementary materials such as flashcards based on the needs of each student in the classroom.

Advance Preparation:

1. Transparency: **Mystery Number Clues** (1 per teacher)
2. Transparency: **Place Value Mat** (1 per teacher)
3. Handout: **Place Value Mat** (1 per pair)
4. Handout: **Base-Ten Riddle Recording Sheet** (1 per pair)
5. Transparency: **Base-Ten Riddles** (1 per teacher)
6. Transparency: **Base-Ten Riddle Recording Sheet** (1 per teacher)
7. Transparency: **Multiple Representations Chart** (1 per teacher)
8. Handout: **Class Match Game** – run on cardstock and cut apart. (1 card per student)
9. Handout: **Multiple Representations Chart** (1 per student)
10. Handout: **Bingo Cards** – make copies of each card #1-10. (1 card per student)
11. Handout: **Bingo Whole Numbers** – cut apart and place into a cup, bowl, etc.
12. Handout: **Battle Recording Sheet** (1 per student)
13. Transparency: **Battle Recording Sheet** (1 per teacher)
14. Handout: **Reading and Writing Whole Numbers Up to 999** (1 per student)
15. **Index cards** labeled individually in large, bold writing 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100 and 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
16. Transparency: **Blank Number Line** (1 per teacher)
17. Handout: **Blank Number Line** (6 per student)
18. Transparency: **Number Line Spinner #1** (1 per teacher)
19. Transparency: **Number Line Spinner #2** (1 per teacher)
20. Handout: **Comparing Facts** (1 per student)
21. Transparency: **Comparing Facts** (1 per teacher)
22. Handout: **Label, Locate, and Compare** (1 per student)

Background Information:

GETTING READY FOR INSTRUCTION SUPPLEMENTAL PLANNING DOCUMENT

Instructors are encouraged to supplement, and substitute resources, materials, and activities to differentiate instruction to address the needs of learners. The Exemplar Lessons are one approach to teaching and reaching the Performance Indicators and Specificity in the Instructional Focus Document for this unit. A Microsoft Word® template for this planning document is located at www.cscope.us/sup_plan_temp.doc. If a supplement is created electronically, users are encouraged to upload the document to their Lesson Plans as a Lesson Plan Resource in your district Curriculum Developer site for future reference.

INSTRUCTIONAL PROCEDURES

Instructional Procedures	Notes for Teacher
ENGAGE 1	**NOTE:** 1 Day = 50 minutes
	Suggested Day 1
1. Place students into pairs.	⟲**SPIRALING REVIEW**
2. Distribute a set of base-ten blocks (include only ten of the 10-longs and 20 units) to each group.	
3. Explain to the groups that they will be given various clues about a mystery number, and they are to work collaboratively to determine the number. Encourage students to use the base-ten blocks to help solve the mystery.	**MATERIALS**
4. Display the transparency: **Mystery Number Clues**. Only reveal one clue at a time giving groups a chance to discuss their strategy and arrange their base-ten blocks according to the clue.	• Transparency: **Mystery Number Clues** (1 per teacher)
5. After revealing the last clue, select a volunteer student to use their base-ten blocks to model on the overhead their group's process. Ask student:	• base-ten blocks (1 set per pair)
• **What is the mystery number?** *Answers may vary.*	
• **How did the clues help you to determine the answer to the mystery?** *Answers may vary.*	
6. Ask students:	
• **Can you represent the mystery number using a different number of base-ten blocks?** *Answers may vary. No, the number 64 could only be represented with six 10-longs and four units for this riddle*	

Instructional Procedures	Notes for Teacher

because it states it must have exactly 10 blocks.

7. Repeat steps #5 & #6 with the remaining mystery numbers.

EXPLORE/ EXPLAIN 1

1. Displaying a unit and a ten-long on the overhead, explain to the students that in order to discover the mystery numbers, students had to know that a unit represented a value of one and a 10-long represented a value of ten.
2. Distribute 100-flats and ask students:
   - **If a unit is worth one and a 10-long is worth ten, what is the value of this base-ten block?** *Answers may vary.*

   Place a 100-flat on the overhead.
   - **Can you prove your answer using base-ten blocks and explain your reasoning?** *Answers may vary. There are 100 units in the base-ten block or there are ten 10-longs in that base-ten block so it would be valued at 100. Explain to the students that the base-ten block is called a 100-flat.*

   If students do not place ten 10-longs on top of the 100-flat for proof then model for students the proof and have all the students do it on their flats. If a student did, have all students model what the student did. After modeling with the ten 10-longs, use them to skip count by tens to prove they are worth 100 units.
3. Display two 100-flats, three 10-longs, and five units randomly on the overhead. Ask students:
   - **What number do these base-ten blocks represent? Explain your thinking.** *Answers may vary. 235 because the digit two is in the hundreds place which is being represented by the 100-flats, the digit three is in the tens place which is being represented by the three 10-longs, and the digit five is in the ones place, which is represented by the five units.*

   Show the block arrangement (teacher note) on the overhead.
   - **How can we group these blocks according to value?** *Answers may vary. We can put the hundreds, tens, and ones blocks in different groups.*

   Display the transparency: **Place Value Mat** and arrange the base-ten blocks as suggested by the student.

   Explain to students that when we say the number 235, we do not put the word "and" in after the two hundred. Further explain that we use "and" when we are talking about money: dollars and cents, such as 2 dollars and 35 cents. Since this number does not represent money, we say the number two hundred thirty-five. Discuss with students that over the next few days as we are working with numbers, we will practice saying them correctly.
4. Repeat steps for 643 and 314. Students will continue working with their assigned partner.
5. Distribute the handout: **Place Value Mat** to each pair.
6. Record the number 461 on the chalkboard/overhead for students to practice representing three-digit numbers with base-ten blocks. Repeat for the numbers: 187 and 719. Explain that the Place Value Mat provides a specific place for each block or value.
7. Explain to the students that they will be participating in an activity called "Show Me". The teacher will either display an arrangement of base-ten blocks on the overhead and the student will write a three-digit number to represent that arrangement in their math journals on paper or on a mini dry erase board, or the teacher will call out a three-digit number and the students will represent the number with base ten blocks on the place value mat.
8. Display three 100-flats, two 10-rods, and eight units on the overhead.

Notes for Teacher

MATERIALS
- Transparency: **Place Value Mat** (1 per teacher)
- Handout: **Place Value Mat** (1 per pair of students)
- base-ten blocks or paper models of base-ten blocks (100-flats)
- math journal or paper
- dry erase boards (if available)
- dry erase markers (if available)

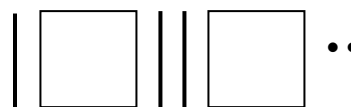**VOCABULARY NOTE**

100-Flat   10-Long   Unit

Base-ten Blocks will be identified as a 100-Flat, 10-Long, and Unit throughout every grade level in CSCOPE. Be sure to use the proper vocabulary for consistency purposes.

TEACHER NOTE
Vary the arrangement of the base-ten blocks so students will recognize the need to regroup according to place value.

TEACHER NOTE
Model the correct naming of the three-digit numbers the students are working with over the next few days.

Instructional Procedures	Notes for Teacher

- **Can you show me the number that represents this amount and explain your thinking?** *Answers may vary. The number is 328 because the digit three is in the hundreds place which is being represented by the three 100-flats, the digit two is in the tens place which is being represented by the two 10-longs, and the digit eight is in the ones place, which is being represented by the eight units.*

Students may record the three-digit number in their math journal, on a piece of paper, or on a dry-erase board. They should hold up what they've written for the teacher to see. Without writing the number, the teacher will ask:

- **Can you show me 585?** *Answers may vary.*

Students may arrange base-ten blocks on the handout: **Place Value Mat** to represent the number.

- **How many base-ten blocks did you use?** *Answers may vary. Five 100-flats, eight 10-longs, and five units; OR four 100-flats, eighteen 10-longs, and 5 units; or five 100-flats, seven 10-longs, and fifteen units, etc.*

INFORMAL OBSERVATION
Teacher monitors for understanding and to see the different arrangements made. An extension could be to ask if there was another arrangement not shared.

9. Teacher asks a student to share his /her arrangement and then asks another student to share his/her arrangement, which may be different from the first. If students only model the number one way, model the number in another way with more tens or more ones.

- **Which arrangement used the least number of base-ten blocks?** *(five 100-flats, two 10-longs and five units)*

Explain that it is often our goal to represent a number using the least number of blocks, but that it is sometimes necessary to use more blocks to represent a number. Further discuss that when they want to represent a number using the least number of blocks, they should always check to be sure all possible exchanges of units for 10-longs or 10-longs for 100-flats have been made.

- **How do you write the number 525?** *Answers may vary.*

TEACHER NOTE
A math "word wall" should be used in the classroom. As formal vocabulary is introduced, the new words should be added to the wall. If possible, illustrate each word with a picture or diagram to explain its meaning. Numbers should be accompanied by the correct spelling (ex. 71, seventy-one). The word wall should be posted all year.

Invite a volunteer student to write 525 on the overhead or on the board.

- **How could we write this number in words?** *five hundred twenty-five*

Invite a volunteer student to write: five hundred twenty-five.

10. To ensure understanding use the following numbers/amounts:
- **Can you show me the number that represents this amount?** (Display eight 100-flats, one 10-long, and two units for the number 812.) *Answers may vary.*
- **Can you show me 277?** (Remember to say the number and have students demonstrate how to represent the number with base-ten blocks, numerically, and with words.) *Answers may vary.*
- **Can you show me 521?** (Remember to say the number and have students demonstrate how to represent the number with base-ten blocks, numerically, and with words.) *Answers may vary.*
- **Can you show me the number that represents this amount?** (Display eight 100-flats, fifteen 10-longs, and six units for the number 956.) *Answers may vary.*
- **Why did you write 956?** *Answers may vary. I knew I couldn't write fifteen in the tens place as it can only hold one digit. Since ten 10-longs make a 100-flat or hundred, I put that hundred with the four hundreds, which made five hundreds and left five tens and six units.*
- **Can you show me 308?** (Remember to say the number and have students demonstrate how to represent the number with base-ten blocks, numerically, and with words.) *Answers may vary.*
- **What is different about this number (308)?** *Answers may vary. There are no tens. I had to put a zero in the tens place.*

TEACHER NOTE
Numbers are hyphenated beginning with twenty-one through ninety-nine. A good way for students to get a mental picture of one of these numbers is to emphasize the "T" sound and have students associate the sound with tens. (ex. Thir**ty**-one would be three tens and one unit.)

TEACHER NOTE
Some students will continue to struggle with writing a zero to indicate that a number has 0 tens or 0 ones. Continue to monitor them or use small group instruction to intervene. Similar activities could be put into math centers.

Instructional Procedures

- **What if you hadn't put the zero in the tens place? What would that number have been?** *38*
- **Does 38 represent the amount of base-ten blocks I have here?** *Answers may vary: No, because I have 100s and the number 38 has no 100s.*

Explain that sometimes there may be no tens or ones. In that case, we have to use a zero to show there are no tens or ones. Explain to students that you will continue to work a few more "Show Me's" and remind them to watch for numbers that might need a zero to represent the number of tens or ones. Give both kinds of "Show Me's" with several examples. Be sure to include numbers with zeros in either the tens or ones place.

EXPLORE/ EXPLAIN 2

1. Distribute base-ten blocks and the handouts: **Place Value Mat** and **Base-Ten Riddle Recording Sheet** to each pair of students. Place the transparency: **Base-ten Riddles** on the overhead and instruct students to read the first riddle.
   - **Can you use your base-ten blocks to solve the riddle?** *Answers may vary.*
   Observe the students and discuss the results.

2. In their groups of two, students will use the handout: **Place Value Mat** and base-ten blocks to solve the remaining riddles. Students should record their pictorial model onto the handout: **Base-Ten Riddle Recording Sheet**.
3. Upon completion, ask for volunteers to share their answers to check the riddles.
   - **What did you have to do for Riddle #5?** (*We had to regroup to find the right number of tens.*)
   It may be necessary to model the riddle on the transparency. Students will need to group ten units to represent the additional ten for 263.
4. Distribute 3 strips of paper to each student and explain that today they will learn to show the value of a number using expanded notation. They will use expanded notation strips. Use the overhead to draw a rectangle to represent the strip of paper.
5. Explain to the students they are to first use base-ten blocks to build the number using their handout: **Place Value Mat**.
   - **Can you show me the number 249 using the least number of base-ten blocks possible?** *Answers may vary.*
   - **How many 100-flats did you use?** (2)
   - **What is the value of a 100-flat?** (100) **How do you know that?** (*Ten 10-longs fit on a 100-flat.*)
   - **What number does two 100-flat blocks represent?** *(200)*
   Instruct students to write a 200 on the left side of their strip.
   - **How many 10-longs are needed to represent 40?** *(4)*
   - **What is the value of four 10-longs?** *(40)* **How do you know?** *Answers may vary. I counted by tens: 10, 20, 30, 40*
   Instruct students to write 40 in the middle of their strip.
   - **How many units are there?** (9)
   - **What is the value of the units?** (9) **How do you know that?** *Answers may vary. Count by ones: 1, 2, 3, 4, 5, 6, 7, 8, 9*
   Instruct students to write 9 on the right side of the strip.
6. Look at your strip now. You see 200, 40, and 9.
   - **If we want to add these numbers to find the total, what number sentence should we write?** *200 + 40 + 9*
7. Watch how I fold my paper strip, one time behind the 4 then slide it over

Notes for Teacher

STATE RESOURCE
TEXTEAMS: Rethinking Elementary Mathematics Part 1: Make It Zero Base-ten Block Version may be used to reinforce these concepts or used as an alternative activity.

Suggested Day 2

SPIRALING REVIEW

MATERIALS
- Base-ten Blocks or Paper models of base ten blocks
- Handout**: Place Value Mat** (1 per pair)
- Handout: **Base-Ten Riddle Recording Sheet** (1 per pair)
- Transparency: **Base-Ten Riddles** (1 per teacher)
- Transparency: **Base-Ten Riddle Recording Sheet** (1 per teacher)
- strips of paper – 3 for each student and 1 for teacher
- Transparency: **Multiple Representations Chart** (1 per teacher)
- Handout: **Class Match Game** (1 card per student)
- 5 pieces of butcher paper
- tape

TEACHER NOTE
Remind students of the symbols that can be used to quickly and efficiently draw the base ten blocks:
A large square represents a 100-flat, a tally mark represents a 10-long, and a dot represents a unit.

TEACHER NOTE
Show students a rubber band and exhibit how it stretches or expands to hold more. Expanded notation is when you take a number and expand it to show the place value of each digit.

Instructional Procedures	**Notes for Teacher**

beside the number 9; and fold once again behind the 2 then slide it over beside the number 4. Fold the paper and show it to the class.

- **What happened to my zeros?** *Answers may vary. They are hidden behind the 4 and the 9.*

8. Model recording the number 249 in a place value chart.
9. Show me the number 602. Fill in the value of each place on your expanded notation strip. Ask:
   - **What do you notice about the tens place?** *Answers may vary. There are no tens.*
   - **How will you represent 602 on your strip?** *Answers may vary. We will put a 0 in the tens place.*

   Have students fold the strip.

   Model recording the number 602 in a place value chart.
   - **When you hear a number read aloud, how do you know if there is a zero in the number?** *Answers may vary. If I do not hear that place read aloud, I know that place has a zero. For instance, if I hear two hundred thirty, I know there are no ones because I did not hear that place read. Another example would be two hundred three. The tens place was not mentioned, so I know there are no tens or zero tens.*

10. Ask students to show 865 using base-ten blocks and complete the expanded notation strip.
11. Show the transparency: **Multiple Representations Chart** on the overhead. Remind the students that they have represented numbers in all the following ways: pictorial, using place value, expanded notation, and in written form. Say: We are going to complete five giant charts as a class.
12. Distribute one handout: **Class Match Game Card** to each student. They are to find the other classmates that have the cards that match their representation. Remind the students that each **Multiple Representations Chart** has five parts: the pictorial, expanded notation, written number, place value mat, and number card.
13. When all matches have been made, tape the matching cards on pieces of butcher paper in the order shown below to create the five **Multiple Representations Charts**. Discuss each representation and why the cards match.
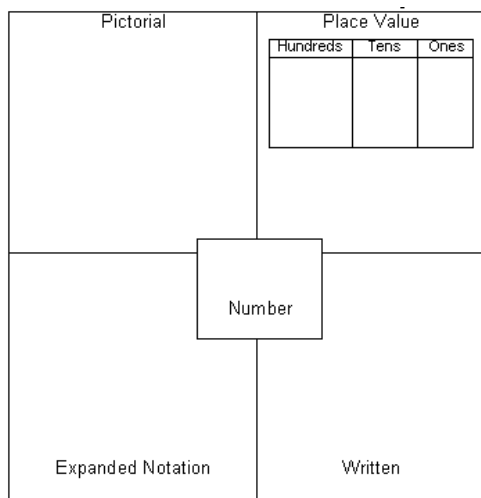
TEACHER NOTE
If there are no tens, only record one zero in that section.

TEACHER NOTE
Many times students refer to the zero as an "O". Explain that the number 602 is not read as six hundred "O" two, but six hundred two.

TEACHER NOTE
Allow students to use base-ten blocks if they are needed to complete the handout: **Multiple Representations Chart.**

TEACHER NOTE
There will be 5 different numbers represented in multiple ways. The directions for the Class Match Game were created for 25 students. If you have more or less than that, you will need to modify the directions to ensure that all students are involved and that all parts are represented. You may want to give some students more than one number card.

EXPLORE/ EXPLAIN 3

Suggested Day 3

Instructional Procedures	Notes for Teacher
1. Distribute base-ten blocks and the handout: **Multiple Representations Chart** to each student. 2. Write the number 132 on the overhead/board. Instruct students to write the number 132 in the center of the **Multiple Representations Chart,** which would represent the numeral representation. 3. Instruct students to represent the number 132 with the fewest number of base-ten blocks and record their concrete representation in the pictorial representation portion of the handout: **Multiple Representations Chart**. 4. Have students identify the digits and record those digits in the place value chart of their handout: **Multiple Representations Chart**. 5. Instruct students to write the number 132 in expanded notation on their handout: **Multiple Representations Chart**. 6. Tell students to write the number in words in the written notation section of their handout: **Multiple Representations Chart**. 7. Ask students: • **How are all of the different representations on the mat showing the number 132 similar?** *Answers may vary. They are all representing the same value, but in different ways.* • **How are the representations of the number 132 different?** *Answers may vary. The pictorial representation does not have any digits at all; it only represents the number with pictures. The place value, expanded notation, and numeral representation have digits but the place value and numeral representation do not state the value of each digit like the expanded notation represents. The written representation only has words but no digits.* 8. Repeat steps #2-7 giving the students a different representation and having them complete the other components of the multiple representations chart (i.e., given the expanded notation 200 + 40, students must represent the given value pictorially, numerically, and in written/place value notation). (The remainder of the sheet will be used for homework. See #13. 9. Assign each student a partner. 10. Distribute a handout: **Bingo Card** and ten counters to each student. 11. Explain to the students that you are going to engage them in a game of Bingo. The teacher will pull out a **Bingo Whole Number Card** from a bowl/basket, etc. and record it on the board/overhead. Students are to look at their bingo cards for the correct representation of the given number. Students will use a counter to cover up the appropriate representation. The first student with three counters aligned vertically, horizontally, or diagonally raises their hand and says "Bingo." The teacher should verify the authenticity of the winning bingo card. 12. Replay the game of Bingo several more times. 13. HOMEWORK: Assign the following two numbers for homework: 505, 174. They are to complete the bottom portion of the handout: **Multiple Representations Chart.**	⟳**SPIRALING REVIEW** **MATERIALS** • base-ten blocks • Handout: **Multiple Representations Chart** (1 per student) • counters (10 per every two students) • Handout: **Bingo Cards** (1 card per student) • Handout: **Bingo Whole Numbers** (1 per teacher) **TEACHER NOTE** Students should be able to complete the various components of the multiple representations chart because of the previous lessons that built that understanding. Monitor students to check for understanding. **RESEARCH** According to the *Principles and Standards of School Mathematics*, students need to use multiple models to develop initial understanding of place value and the base-ten number system, develop a sense of whole numbers and represent them in flexible ways, connect number words and numerals to quantities they represent, and using various physical models and representations.
ELABORATE	**Suggested Day 4**
1. Divide students into pairs. Distribute the handout: **Battle Recording Sheet** to each student and a decahedra die to each student pair. 2. Model rolling the decahedra die 3 times and discuss with the class how to form the largest three-digit number possible with those rolls. Complete the "My Number" blanks in the first row of the sample problem on the transparency: **Battle Recording Sheet**. Ask: • **Which digit should we use in the hundreds place of our three-digit number? Why?** *Answers may vary. We should use the largest number rolled in order to have the most hundreds in the hundreds place.* • **Which digit should we use in the tens place? Why?** *Answers may*	⟳**SPIRALING REVIEW** **MATERIALS** • Handout: **Battle Recording Sheet** (1 per student) • Transparency: **Battle Recording Sheet** (1 per teacher) • decahedra dice (1 per student pair)

Instructional Procedures

vary. We should use the second largest number rolled in the tens place in order to have the largest number possible.

3. Invite a student to roll the die to get a second three-digit number and record in the Partner's Number space provided on the transparency: **Battle Recording Sheet**.
4. Instruct students to transfer their number and their partner's number into the table in the spaces provided. Ask:
   - **What place should we look at first to determine which number is larger?** *(the hundreds place.)*
   - **What are the digits in the hundreds place?** *Answers may vary.*
   - **Is the digit in the hundreds place from my first number (the number on the left) less than, equal to, or greater than the digit in the hundreds place from the second number (the number on the right)?** *Answers may vary.*
   - **How do we know which number is larger?** *Answers may vary. If the hundreds digit on the left is less than the hundreds digit on the right then the whole number on the left is less than the whole number on the right. If the hundreds digit on the left is greater than the hundreds digit on the right then the whole number on the left is greater than the whole number on the right. If the hundreds digit on the left is equal to the hundreds digit on the right then we must look at the digits in the tens place to determine which number is larger.*
   - **What if the digits in the tens place were equal?** *Answers may vary. Then look at the digits in the ones place.*
5. Model recording the appropriate comparison symbol in the space provided in the table. Ask:
   - **What other number comparison would say the same thing?** *Answers may vary.*

   If students do not come up with the second comparison statement, then model recording that comparison statement as well. (Ex. 752 < 862 and 862 > 752.)
6. Explain to students that the winner of each round will be the student with the largest number. Instruct students to play the game 10 times. The player with the most wins will be the winner of the game.

EVALUATE 1

1. Students complete the evaluation using the handout: **Reading and Writing Whole Numbers Up to 999**. They may use base-ten blocks if they wish.

ENGAGE 2

1. Ask:
   - **What does it mean to stand in a line or to line up?** *Answers may vary.*
2. Invite 5 students to come to the front and line up. Explain that today we will learn about number lines. Ask:
   - **When we line up does the line have a starting point and an ending point?** *Answers may vary.*
3. Instruct the students in the line to reach out their left arm and touch the next person's shoulder so that their arm is stretched out completely straight. Explain that when we are standing in line we try to stand the same distance apart.
4. Stretch a piece of string/rope/adding machine tape in front of the students and have them hold on.

Notes for Teacher

Battle Recording Sheet

Sample Round:

My Three Digits Rolled_____ Partner's Three Digits Rolled_____

My Largest Number_____ Partner's Largest Number_____

My Number	Comparison Symbol	Partner's Number	Winner

Round	My Number	Comparison Symbol	Partner's Number	Winner
1				
2				
3				
4				
5				
6				
7				
8				

Suggested Day 5

🌀**SPIRALING REVIEW**

MATERIALS
- Handout: **Reading and Writing Whole Numbers Up to 999** (1 per student)
- base-ten blocks

Suggested Day 6

🌀**SPIRALING REVIEW**

MATERIALS
- Transparency: **Blank Number Line** (1 per teacher)
- string/rope/adding machine tape
- adding machine tape (2 desktop size pieces per student)
- clothespins or tape
- index cards with numbers written on them
- sticky dots

Instructional Procedures	Notes for Teacher

Instructional Procedures

5. Display the transparency: **Blank Number Line** and explain that the string/rope/adding machine tape represents the line (point to the horizontal line) while each student represents the little vertical lines. Explain that these are called tic marks and they must be evenly spaced apart.
6. Instruct the students to sit down.
7. Distribute an index card with a number on it (0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100) to each of 11 students. Invite these students to stand in a line facing the class and display their card.
8. Ask the class to give instructions to order the students with their cards from least to greatest as they appear from left to right.
9. Invite the students holding the 0 and 100 cards to step forward. Give the students the string/rope/adding machine tape to stretch between them. Help these two students to attach their number cards to the line using clothespins/tape.
10. Invite the remaining students to step forward, evenly distribute themselves along the line (this may require assistance), and attach their number cards to the line. As they attach their cards they may sit down.
11. Assist the two students holding the ends of the line to attach the line to the wall/board being sure the line is stretched tight. If necessary use extra tape in the middle to support the line. These two students may sit down.
12. Repeat steps #7-11 for index cards labeled 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, so that both number lines are visible at the front of the room.
13. Explain that the string/rope/adding machine tape represents a number line. Ask:
    - **What do you see in common with the two number lines?** *Answers may vary. They both have numbers evenly spaced along the line. The numbers are arranged in order from least to greatest.*
    - **What do you see that is different about the two number lines?** *Answers may vary. There are different number values on the lines.*
14. Instruct the students to "point" to the number 30. Use a laser pointer or a red sticky dot to place a point on the 30 index card. Repeat for the numbers 90, 50, and 70. Explain that each number on a number line is called a point and that a point is represented with a dot on the tic mark of that number. Model writing numbers below the tic marks of the transparency: **Blank Number Line** and marking points at the appropriate numbers.
15. Provide students two pieces of adding machine tape and a counter. Instruct them to recreate the two number lines for themselves and tape them to their desktop. Ask:
    - **Locate the point 20 on one of your number lines using your counter.**
    - **Which number line did you use? Explain your thinking.** *(I used the number line with the numbers from 0 to 100 on it because it was the only one with the number 20 on it. The other number line ended at 10.)*
    Repeat for 60, 80, and 40.
    - **Locate the point 4 on one of your number lines using your counter.**
    - **Which number line did you use? Explain your thinking.** *Answers may vary. I used the number line with the numbers from 0 to 10 on it because I could see the number 4.*
    - **Does the point 4 exist on the other number line? Explain your thinking.** *Answers may vary.*
    Explain to the students that the point 4 does exist on the 0 to 100 number line, but that it does not have a label yet. Ask:
    - **Approximately where do you think the point 4 should be located on the 0 to 100 number line? Between which two labeled numbers? Explain your thinking.** *(Between the 0 and 10 labels.)*
    - **What kind of labels would we need for points between 30 and 40?**

Instructional Procedures	Notes for Teacher
Answers may vary. 31, 32, 33, 34, 35, 36, 37, 38, 39 • **What kind of labels would we need for points between 80 and 90?** *Answers may vary. 81, 82, 83, 84, 85, 86, 87, 88, 89* • **What kind of labels would we need for points between 10 and 20?** *Answers may vary. 11, 12, 13, 14, 15, 16, 17, 18, 19* • **Do you think other points exist on the 0 to 100 number line that are not yet labeled? Give me some examples.** *Answers may vary.* Ask volunteers to identify a number and what interval it should fall between.	
EXPLORE/ EXPLAIN 4	**Suggested Day 7**

1. Distribute 3 copies of handout: **Blank Number Line** to each student.
 2. Instruct students to take each sheet and cut apart the boxes.
 3. Instruct students to pick up three boxes and glue them end to end to make a longer number line. Explain that they should carefully glue them so that the big tic marks at the ends overlap.
 4. Explain to students that they are going to create number labels for the number line.
 5. Display the transparency: **Number Line Spinner #1** and use a paper clip and pencil tip to spin for a starting number. Ask:
     • **Where should the starting number label be written on your number line?** *(The left end)*
 6. Instruct students to skip count by tens to label each of the large tic marks on their number line after the starting number.
 7. Instruct students to label the remaining tic marks appropriately that fall between the large tic marks. Move about the room to check for understanding and accuracy. Upon completion, ask:
     • **What digit is in the tens place for all of the labels between ___ and ___ (choose an interval)?** *Answers may vary.*
     • **What happens to the digits in the ones place in this interval?** *(They increase by ones from 1 to 9.)*
 Repeat for a different interval.
     • **What happens to the digits in the tens place as you move across the number line from left to right along the big tic marks?** *(They increase in order from left to right.)*
 Choose two points and instruct the students to locate them one at a time on their number line and draw a point to show the location of each number.
 8. Repeat steps #3 through #6 two more times for different starting numbers, intervals, and points.
	⦾**SPIRALING REVIEW**
	
	 MATERIALS
	 • Handout: **Blank Number Line** (3 per student)
	 • scissors
	 • glue/tape
	 • paper clips
	 • Transparency: **Number Line Spinner #1** (1 per teacher)

EXPLORE/ EXPLAIN 5	**Suggested Day 8**

1. Distribute 3 copies of handout: **Blank Number Line** to each student.
 2. Instruct students to take each sheet and cut apart the boxes.
 3. Instruct students to pick up three boxes and glue them end to end to make a longer number line. Explain that they should carefully glue them so that the big tic marks at the ends overlap.
 4. Explain to students that they are going to create number labels for the number line.
 5. Display the transparency: **Number Line Spinner #2** and use a paper clip and pencil tip to spin for a starting number. Ask:
     • **Where should the starting number label be written on your number line?** *(The left end)*
 6. Instruct students to skip count by hundreds to label each of the large tic marks on their number line after the starting number.
 7. Instruct students to label the remaining tic marks that fall between the large tic marks appropriately by skip counting by tens. Move about the room to check for understanding and accuracy. Upon completion, ask:
     • **What digit is in the hundreds place for all of the labels between**
	⦾**SPIRALING REVIEW**
	
	 MATERIALS
	 • Handout: **Blank Number Line** (3 per student)
	 • scissors
	 • glue/tape
	 • Transparency: **Number Line Spinner #2** (1 per teacher)

Instructional Procedures	Notes for Teacher
___ and ___ (choose an interval)? • **What happens to the digits in the tens place in this interval?** *(They increase by ones from 1 to 9.)* Repeat for a different interval. • **What happens to the digits in the hundreds place as you move across the number line from left to right along the big tic marks?** *(They increase in order from left to right.)* Choose two points and instruct the students to locate them one at a time on their number line and draw a point to show the location of each number. 8. Repeat steps #3 through #6 two more times for different starting numbers, intervals, and points. 9. Explain that number lines can have any starting number and count by ones or skip count by tens, fifties, hundreds, etc.	
ELABORATE 2	**Suggested Day 9** ◉ **SPIRALING REVIEW**
1. Display transparency: **Blank Number Line** and ask for a student volunteer to help you label the tic marks for the numbers 10 through 20. 2. Ask for a student volunteer to help you locate the two points 12 and 17 on the number line. Ask: • **Which number is smaller: 12 or 17?** *(12)* • **Is 12 to the left of 17 on the number line or to the right of 17 on the number line?** *(12 is to the left of 17 on the number line.)* • **How should I record the comparison statement for 12 is less than 17?** *(12 < 17)* 3. Ask for a student volunteer to locate the two points 13 and 15 on the number line. • **Which number is larger: 13 or 15?** *(15)* • **Is 15 to the left of 13 on the number line or to the right of 13 on the number line?** *(15 is to the right of 13 on the number line.)* • **How should I record the comparison statement for 15 is greater than 13?** *(15 > 13)* 4. Ask: • **Do you think that numbers that are smaller than another number are always located to the left of the larger number on the number line?** *Answers may vary.* • **Do you think that numbers that are larger than another number are always located to the right of the smaller number on the number line?** *Answers may vary.* 5. Distribute the handout: **Comparing Facts** to each student. 6. Explain to students that they must first solve the addition problem, and then locate the sum for each on the provided number line. Finally, they are to write a comparison statement about the two sums. You may want to model with the first problem. 7. Instruct students to complete the handout individually. 8. Upon completion use the transparency: **Comparing Facts** to review the problems then ask the questions from step #4 again. After students have time to respond then ask the class to chorally recite the following with you. **LLLLLess is to the LLLLeft** emphasizing the letter L. **Grrrrrreater is to the RRRRight** emphasizing the letter R.	**MATERIALS** • Transparency: **Blank Number Line** (1 per teacher) • Handout: **Comparing Facts** (1 per student) • Transparency: **Comparing Facts** (1 per teacher)
EVALUATE 2	**Suggested Day 10** ◉ **SPIRALING REVIEW**
1. Distribute the handout: **Label, Locate, and Compare** to each student. 2. Instruct students to complete the handout individually.	**MATERIALS** • Handout: **Label, Locate, and Compare** (1 per student)

Mystery Number Clues (pp. 1 of 2)

Mystery Number #1

Clue #1 My number is greater than 50.

Clue #2 My number is less than 70.

Clue #3 The digit in the ones place is a 4.

Clue #4 You will use exactly ten base ten blocks.

Clue #5 What's the mystery number?

The Mystery Number is **64.**

Mystery Number #2

Clue #1 My number is between 20 and 30.

Clue #2 The digit in the tens place is smaller than the digit in the ones place.

Clue #3 You will use exactly eleven base-ten blocks.

Clue #4 What's the mystery number?

The Mystery Number is **29.**

Mystery Number Clues (pp. 2 of 2)

Mystery Number #3

Clue #1 My number is greater than 30 but less than 40.

Clue #2 The digit in the ones and tens place is the same.

Clue #3 You will use exactly six base-ten blocks.

Clue #4 What's the mystery number?

The Mystery Number is **33.**

Mystery Number #4

Clue #1 My number is > than 30 and < 50.

Clue #2 The sum of the digits in the tens place and the digits in the ones place is 4.

Clue #3 What mystery number did you find?

Clue #4 Did anyone get a different number?

The Mystery Number could be **31 or 40.**

Place Value Mat

Hundreds	Tens	Ones

Base-Ten Riddle Recording Sheet KEY

Riddle #1 :   Answer: 412

Base Ten Block Pictorial:
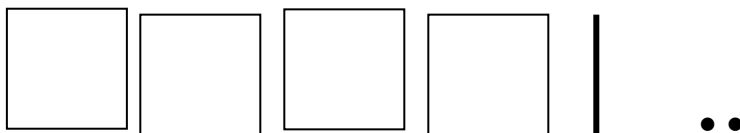
Riddle #2 :   Answer: 179

Base Ten Block Pictorial:
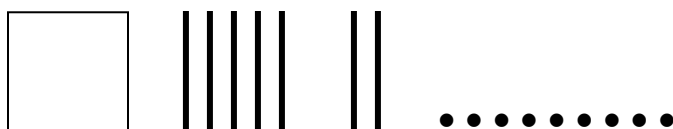
Riddle #3 :   Answer: 120

Base Ten Block Pictorial:
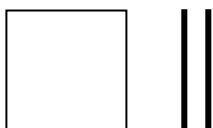
Riddle #4   Answer: 305

Base Ten Block Pictorial:

Riddle #5:   Answer: 263

Base Ten Block Pictorial:
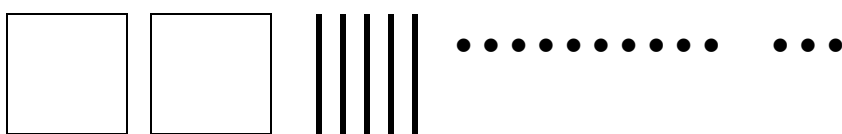
Base-Ten Riddle Recording Sheet

Riddle #1   Answer:

Base Ten Block Pictorial:

Riddle #2:   Answer:

Base Ten Block Pictorial:

Riddle #3 :   Answer:

Base Ten Block Pictorial:

Riddle #4 :   Answer:

Base Ten Block Pictorial:

Riddle #5 :   Answer:

Base Ten Block Pictorial:

Base-Ten Riddles

Riddle #1 I have seven base-ten blocks representing my value. I have only one 10-rod represented on the value of my number. The digit in the hundreds place is double the number in the ones place. Who am I?

Riddle #2 I am an odd number that has one hundred and seven tens. The digit in the ones place value is greater than seven but less than 10. Who am I?

Riddle #3 I have only 3 base ten blocks representing the value of my number. I am only represented with 100-flats and 10-rods. The digit in the hundreds place is smaller than the digit in the tens place. Who am I?

Riddle #4 I have three hundreds and five ones. Who am I?

Riddle #5 I have two hundreds, five tens, and thirteen ones. Who am I?

Multiple Representations Chart

Pictorial	Place Value		
	Hundreds	Tens	Ones

Number

Expanded Notation	Written

Pictorial	Place Value		
	Hundreds	Tens	Ones

Number

Expanded Notation	Written

Pictorial	Place Value		
	Hundreds	Tens	Ones

Number

Expanded Notation	Written

Pictorial	Place Value		
	Hundreds	Tens	Ones

Number

Expanded Notation	Written

Pictorial

Place Value

Hundreds	Tens	Ones
5	0	2

Expanded Notation

$$500 + 0 + 2$$

Written

five hundred two
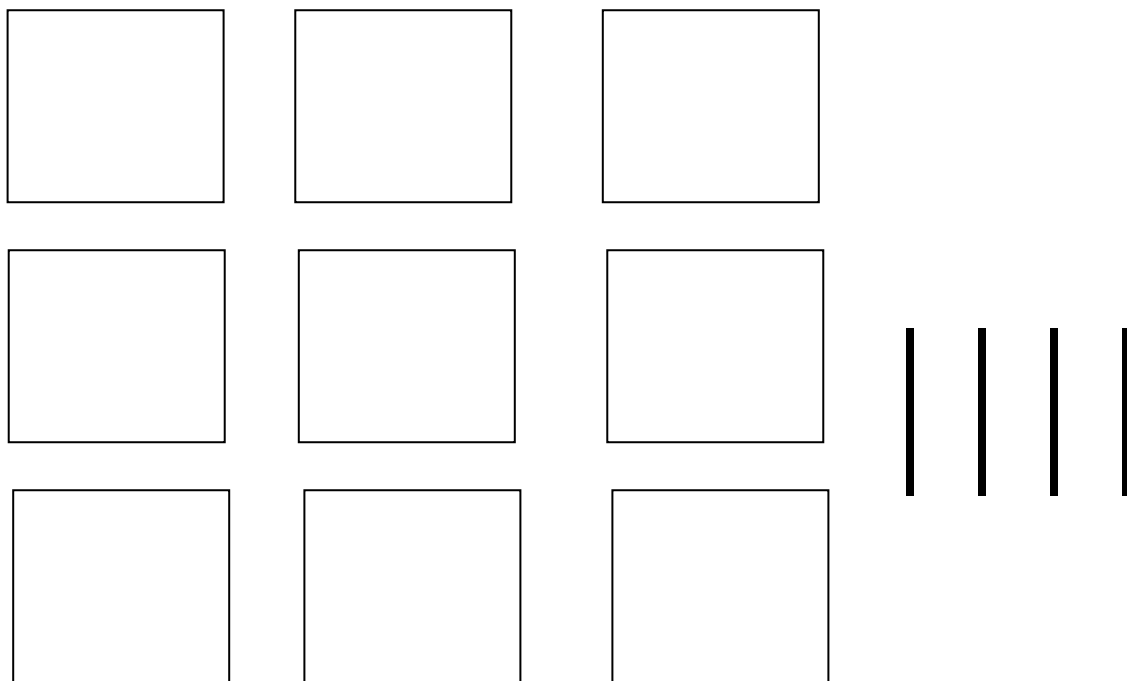
Pictorial

Place Value

Hundreds	Tens	Ones
9	4	0

Expanded Notation

$$900 + 40 + 0$$

Written

nine hundred forty

Pictorial
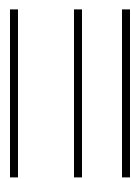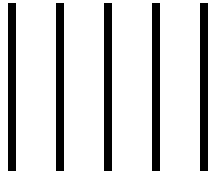
Place Value

Hundreds	Tens	Ones
2	8	6

Class Match Game

Expanded Notation

$$200 + 80 + 6$$

Class Match Game

Written

two hundred eighty-six
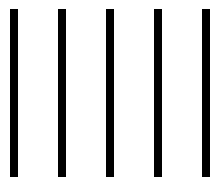
Pictorial

Place Value

Hundreds	Tens	Ones
1	7	3

Class Match Game

Expanded Notation

$$100 + 70 + 3$$

Class Match Game

Written

one hundred seventy-three

Pictorial
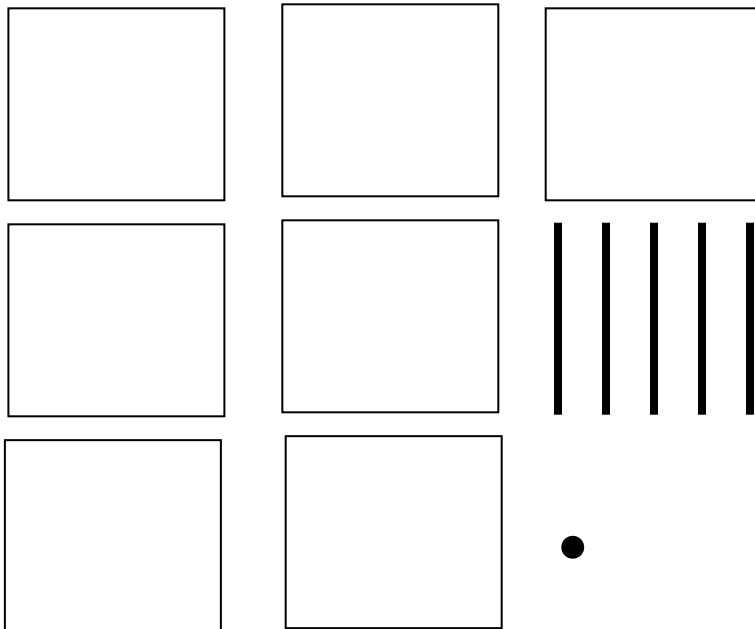
Place Value

Hundreds	Tens	Ones
7	5	1

Expanded Notation

$$700 + 50 + 1$$

Written

seven hundred fifty-one

Number Cards

173

751

286

502
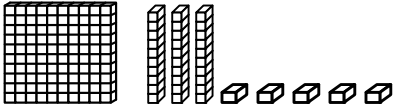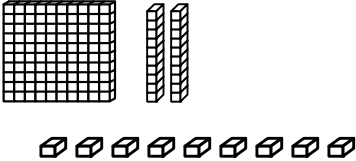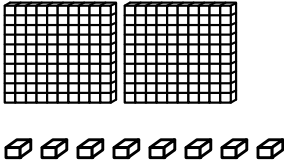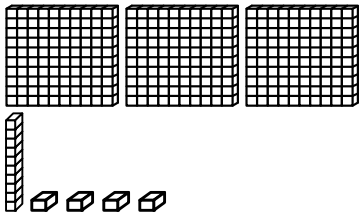
940
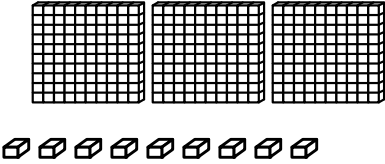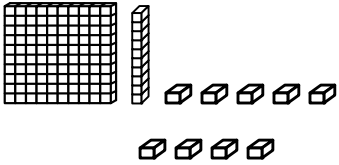
Bingo Card #1

	200 + 70 +6	three hundred nine
4 hundreds + 8 tens + 2 ones	five hundred fifty	600 + 20 + 3
700 + 40 + 7		8 hundred + 1 ten

Bingo Card #2
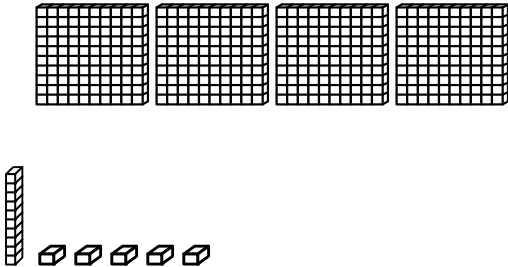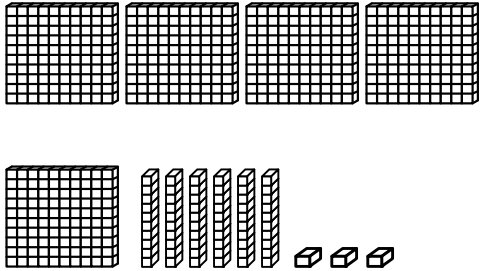
	4 hundred + 5 tens + 9 ones	**500 + 60 + 3**
six hundred eighteen	**700 + 90 + 9**	
800 + 30 + 7	**nine hundred twenty-four**	**8 hundred + 1 ten**
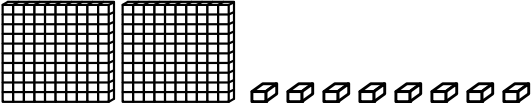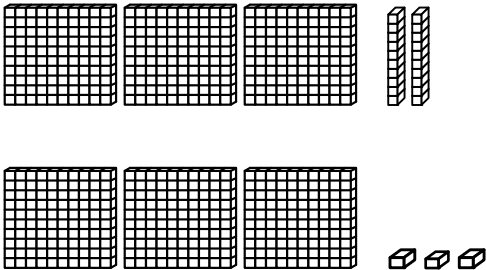
Bingo Card #3

nine hundred twenty-four		**400 + 80 + 2**
2 hundreds + 7 tens + 6 ones	**700 + 40 + 7**	**six hundred eighty**
	three hundred ninety	**500 + 60 + 3**
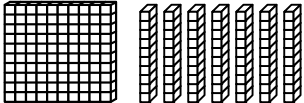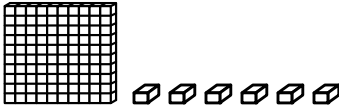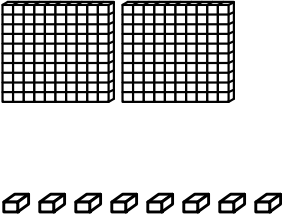
Bingo Card #4

one hundred thirty-five	**200 + 0 + 8**	
three hundred ninety	**600 + 20 + 3**	**7 hundreds + 9 tens + 9 ones**
9 hundreds + 2 tens + 4 ones	**nine hundred forty-four**	
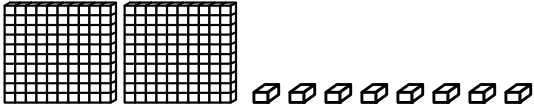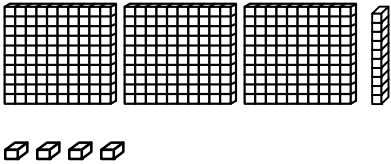
Bingo Card #5

9 hundred + 4 tens + 4 ones	**one hundred twenty-nine**	**three hundred nine**
400 + 50 + 9		**500 + 10 + 5**
	8 hundreds + 1 one	**nine hundred twenty-four**
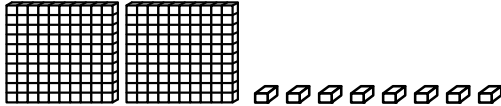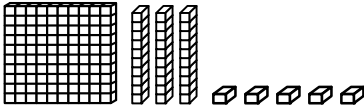
Bingo Card #6

100 + 30 + 5	**9 hundreds + 2 tens + 4 ones**	**five hundred sixty-three**
	700 + 40 + 7	
three hundred ninety	**400 + 80 + 2**	**7 hundreds + 9 tens + 9 ones**
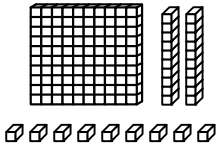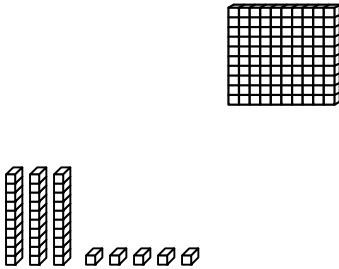
Bingo Card #7

eight hundred ten		**700 + 90 + 9**
five hundred fifteen	**1 hundred + 2 tens + 9 ones**	**four hundred eighty-two**
6 hundreds + 8 ones		**900 + 40 + 4**
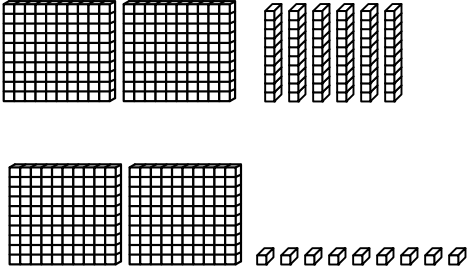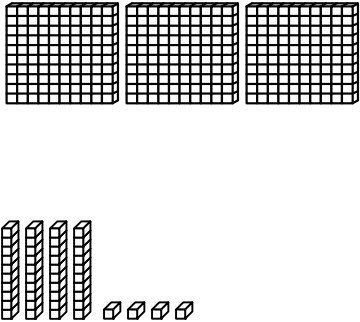
Bingo Card #8

three hundred forty	**6 hundreds + 2 tens + 3 ones**	
	400 + 80 + 2	**7 hundreds + 4 tens + 7 ones**
500 + 10 + 5	**eight hundred ten**	**900 + 20 + 4**

Bingo Card #9

	200 + 70 + 6	**five hundred fifteen**
3 hundreds + 9 ones	**400 + 80 + 2**	**six hundred eighteen**
7 hundreds + 9 tens + 9 ones	**two hundred eight**	

Bingo Card #10

600 + 0 + 8		**four hundred eighty-two**
9 tens + 4 hundreds + 4 ones	**200 + 70 + 6**	**100 + 30 + 5**
five hundred fifteen	**7 hundreds + 9 tens + 9 ones**	

Bingo Whole Numbers

135	**129**	**276**
208	**309**	**314**
482	**459**	**515**
563	**623**	**680**
747	**799**	**810**
837	**944**	**924**

Battle Recording Sheet Sample KEY

My Three Digits Rolled 2, 5, 4   Partner's Three Digits Rolled 3, 6, 4

My Largest Number 542   Partner's Largest Number 643

Sample Round	My Number	Comparison Symbol	Partner's Number	Winner
Sample 1	542	<	643	Partner

Round	My Number	Comparison Symbol	Partner's Number	Winner
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Battle Recording Sheet

My Three Digits Rolled_____   **Partner's Three Digits Rolled_____**

My Largest Number_____   **Partner's Largest Number_____**

Sample Round	My Number	Comparison Symbol	Partner's Number	Winner

Round	My Number	Comparison Symbol	Partner's Number	Winner
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Reading and Writing Whole Numbers Up to 999 (pp. 1 of 2) **KEY**

Complete the following multiple representations charts.

Pictorial	Place Value
	H T O 7 0 9
709 Number	
700 + 0 + 9	**seven hundred nine**
Expanded Notation	Written

Pictorial	Place Value
	H T O 4 1 2
412 Number	
400 + 10 + 2	**Four hundred twelve**
Expanded Notation	Written

Use base-ten blocks to find the answers to the clues.

- Clue #1 You will use exactly eleven base-ten blocks.
- Clue #2 The number is less than 300.
- Clue #3 The digit in the tens place is one less than the digit in the ones place.
- Who am I? <u>245</u>

- Clue #1 You will use exactly fifteen base-ten blocks.
- Clue #2 The number is greater than 300 but less than 400.
- Clue #3 The digit in the ones and tens place are the same.
- Who am I? 366

Reading and Writing Whole Numbers Up to 999 (pp. 2 of 2) KEY

- Clue #1 You will use exactly 5 base-ten blocks.
- Clue #2 My number is greater than 150 and less than 250.
- Clue #3 The digit in the tens place is half of the digit in the ones place
- Who am I? 212

Solve the following problem.

Louisa was working on an art project. Below is a list of the items she gave her mother to buy. The most important item she needed was two hundred eight craft sticks. When her mother came home from shopping, Louisa found that her mother only bought 28 craft sticks. Explain what probably happened below.

Items Needed	Amount Needed
beads	93 packages
glue sticks	6
craft sticks	28 sticks
sequins	10 packages
fabric	4 yards

Explain your thinking about what happened.

Louisa forgot to place the 0 in the tens place. She should have written 208.

_____

_____

_____

Reading and Writing Whole Numbers Up to 999 (pp. 1 of 2)

Complete the following multiple representations charts.

Pictorial	Place Value
	H T O
Number	
	seven hundred nine
Expanded Notation	Written

Pictorial	Place Value
	H T O
412 Number	
Expanded Notation	Written

Complete the following riddles:

Use base-ten blocks to find the answers to the clues.

- Clue #1 You will use exactly eleven base-ten blocks.
- Clue #2 The number is less than 300.
- Clue #3 The digit in the tens place is one less than the digit in the ones place.
- Who am I? _____

- Clue #1 You will use exactly fifteen base-ten blocks.
- Clue #2 The number is greater than 300 but less than 400.
- Clue #3 The digit in the ones and tens place are the same.
- Who am I? _____

Reading and Writing Whole Numbers Up to 999 (pp. 2 of 2)

- Clue #1 You will use exactly 5 base-ten blocks.
- Clue #2 My number is greater than 150 and less than 250.
- Clue #3 The digit in the tens place is half of the digit in the ones place.
- Who am I? _____

Solve the following problem.

Louisa was working on an art project. Below is a list of the items she gave her mother to buy. The most important item she needed was two hundred eight craft sticks. When her mother came home from shopping, Louisa found that her mother only bought 28 craft sticks. Explain what probably happened below.

Items Needed	Amount Needed
beads	93 packages
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craft sticks	28 sticks
sequins	10 packages
fabric	4 yards

Explain your thinking about what happened.

_____

_____

_____

_____
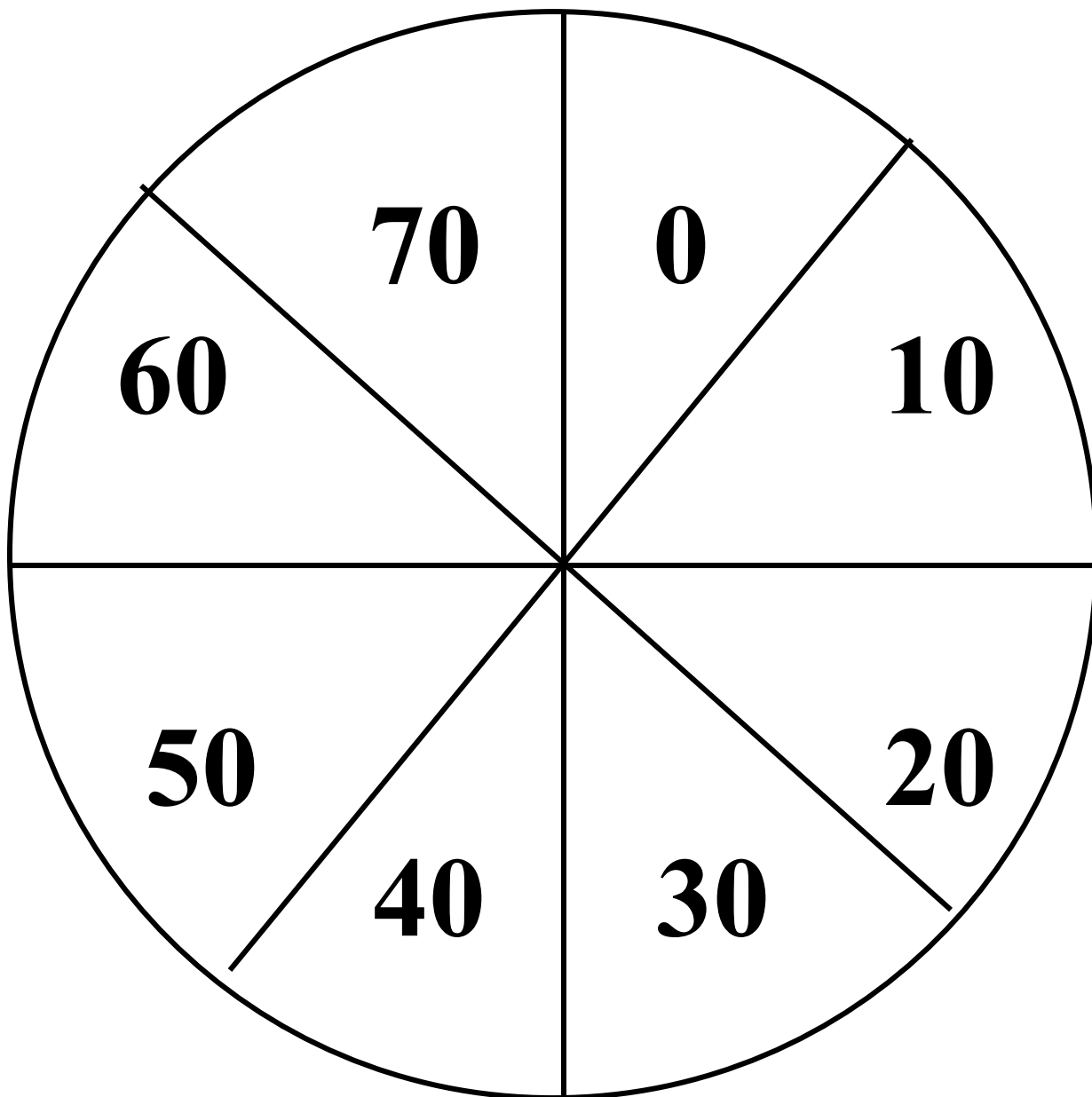
Blank Number Line
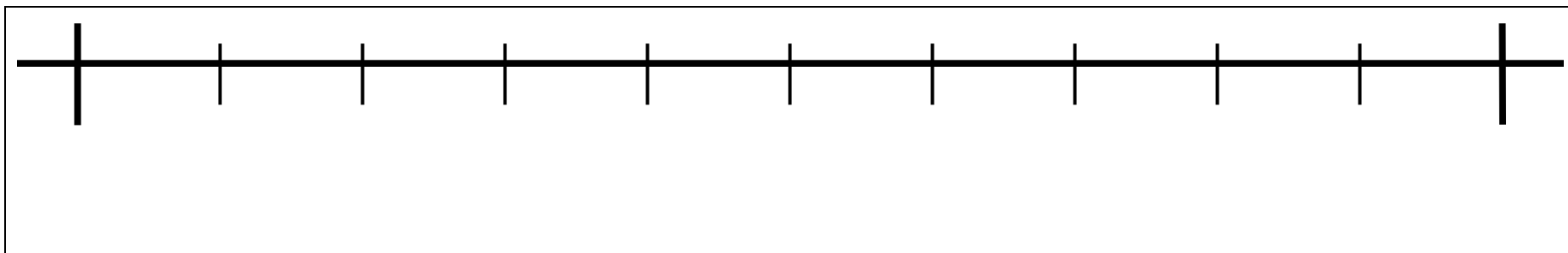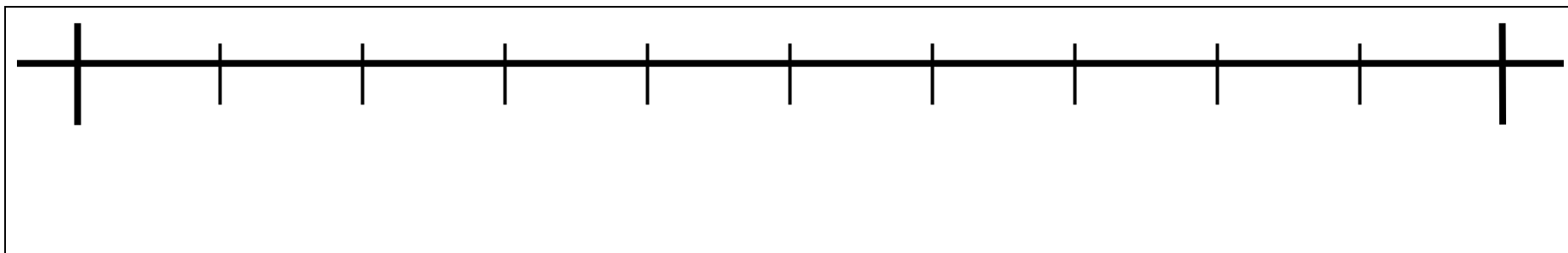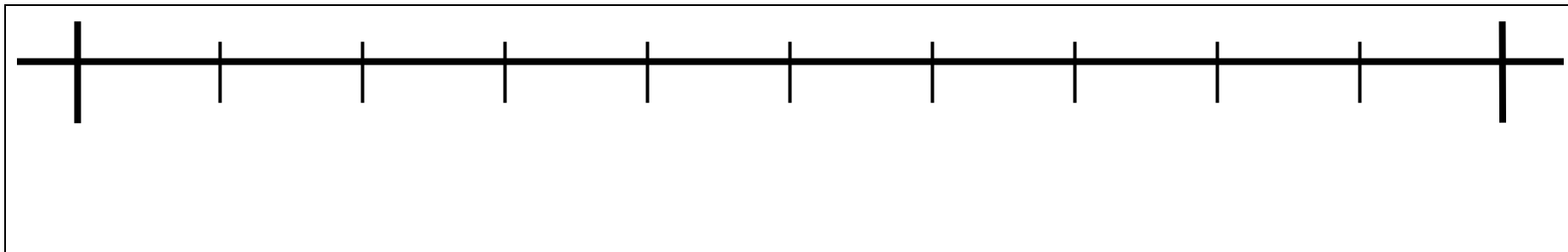
Number Line Spinner #1

Number Line Spinner #2

700 0

600 100

500 200

400 300
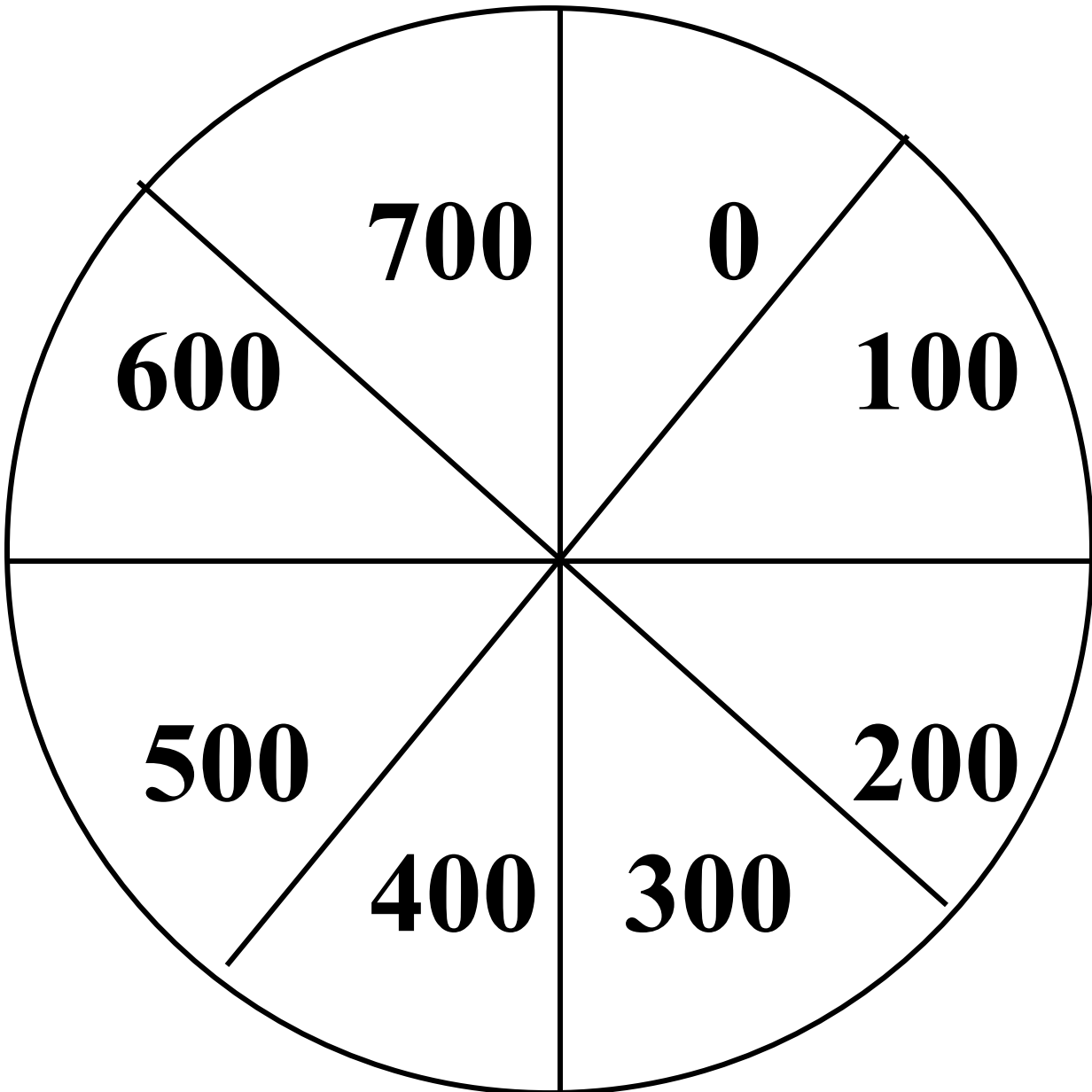
Comparing Facts KEY

Find the sum for each addition problem. Locate the sum on the number line. Write a comparison statement about the sums.

| 6 + 6 = __12__ | 7 + 9 = __16__ | **Comparison Statement** 12 < 16 |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

| 4 + 5 = __9__ | 7 + 6 = __13__ | **Comparison Statement** 9 < 13 |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

| 8 + 6 = __14__ | 5 + 5 = __10__ | **Comparison Statement** 14 > 10 |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

| 7 + 8 = __15__ | 9 + 9 = __18__ | **Comparison Statement** 15 < 18 |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

| 7 + 7 = __14__ | 7 + 5 = __12__ | **Comparison Statement** 14 > 12 |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

09/19/08
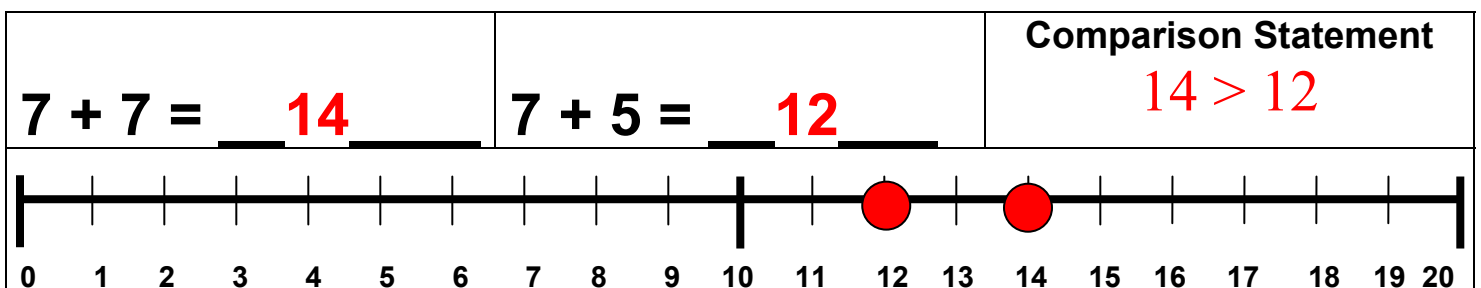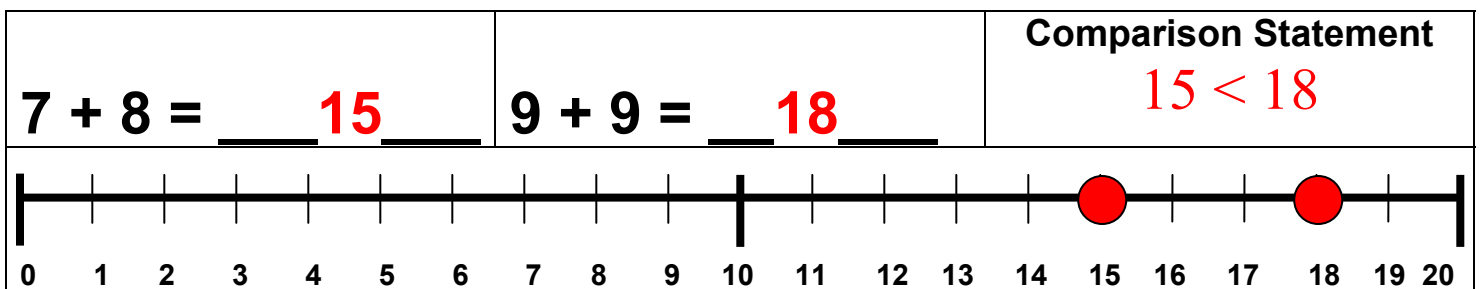
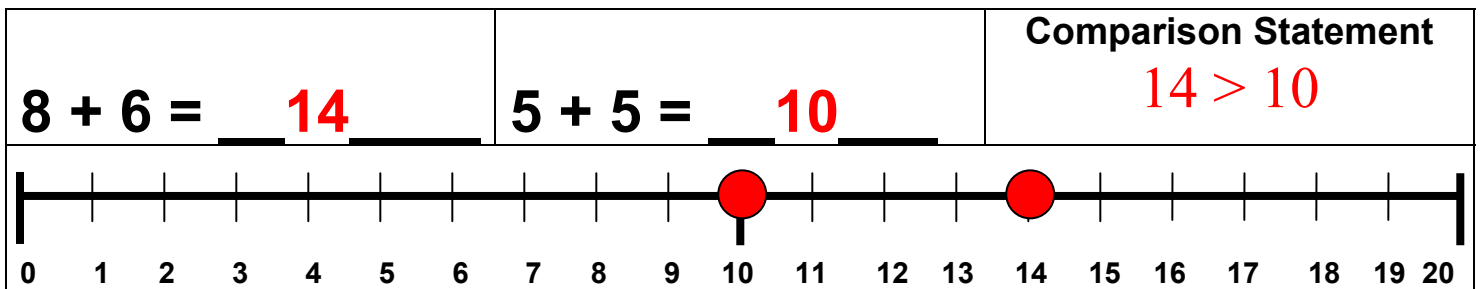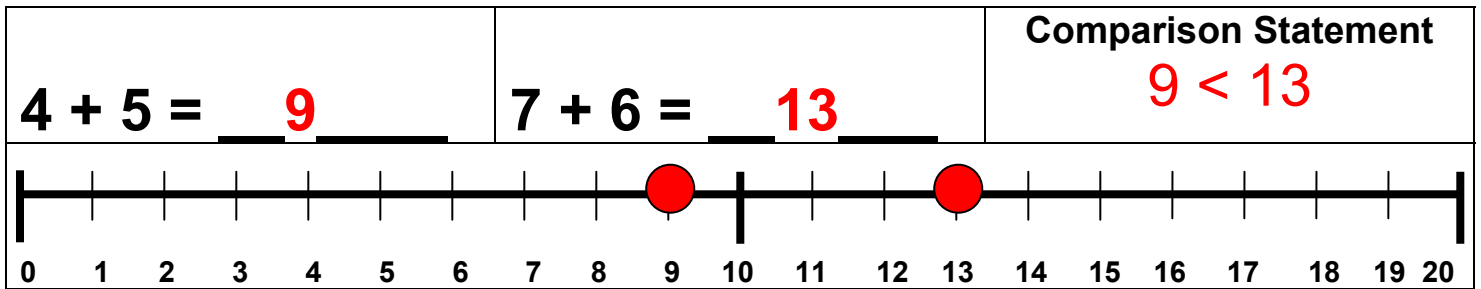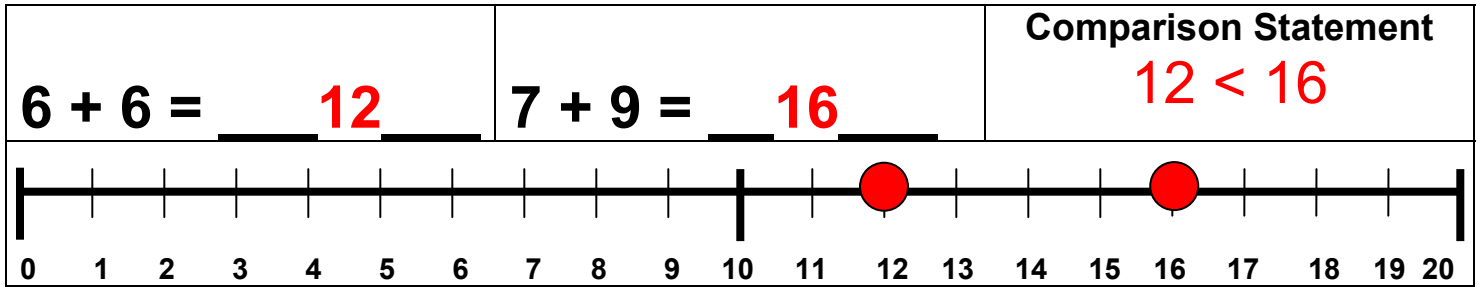# Comparing Facts

Find the sum for each addition problem. Locate the sum on the number line. Write a comparison statement about the sums.

| 6 + 6 = _____ | 7 + 9 = _____ | **Comparison Statement** |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

| 4 + 5 = _____ | 7 + 6 = _____ | **Comparison Statement** |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

| 8 + 6 = _____ | 5 + 5 = _____ | **Comparison Statement** |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

| 7 + 8 = _____ | 9 + 9 = _____ | **Comparison Statement** |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

| 7 + 7 = _____ | 7 + 5 = _____ | **Comparison Statement** |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Label, Locate, and Compare KEY

Label the number line.

1. Starting Number 200, Skip Count by Tens

200   210   220   230   240   250   260   270   280   290   300

2. Starting Number 50, Count by Ones

50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70

3.

| 3 + 8 = __11__ | 9 + 5 = __14__ | **Comparison Statement** **11 < 14** |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

4.

| 8 + 8 = __16__ | 6 + 4 = __10__ | **Comparison Statement** **16 > 10** |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

5.

| 5 + 8 = __13__ | 7 + 9 = __16__ | **Comparison Statement** **13 < 16** |

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
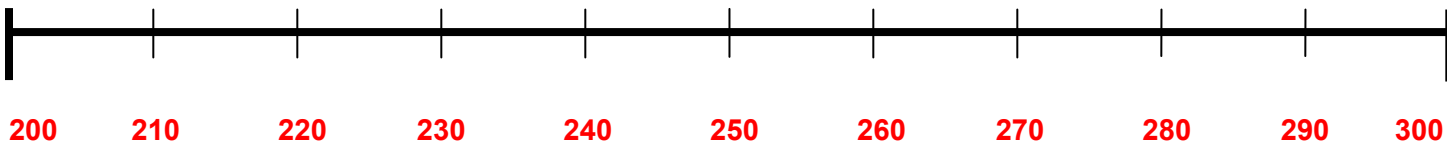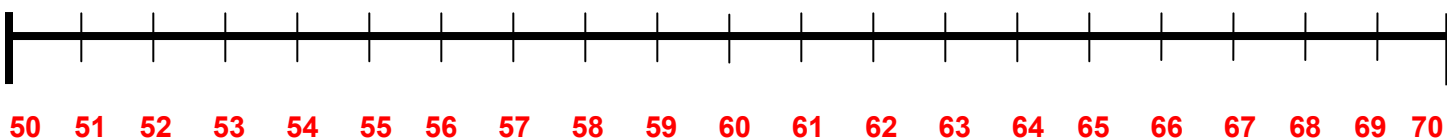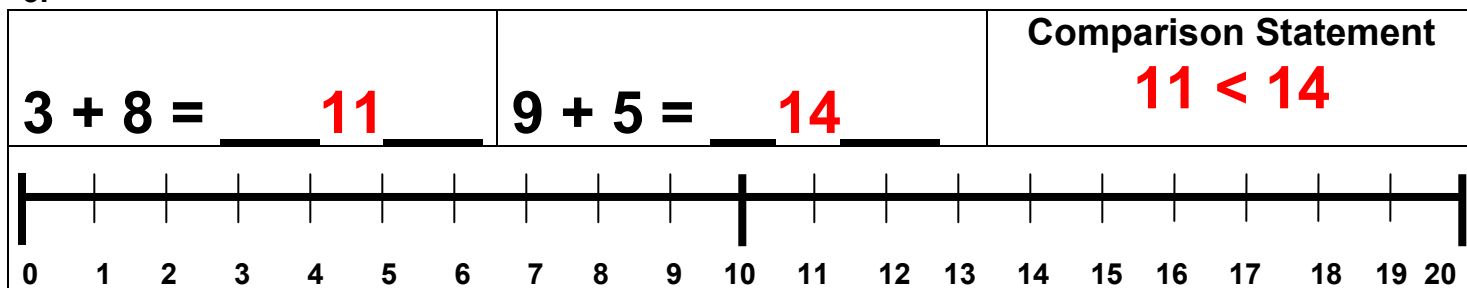
Label, Locate, and Compare

Label the number line.

1. Starting Number 200, Skip Count by Tens

2. Starting Number 50, Count by Ones
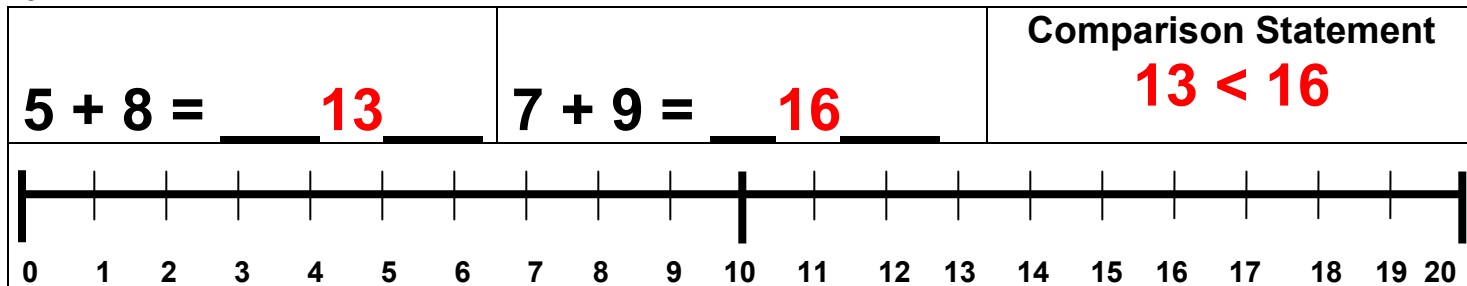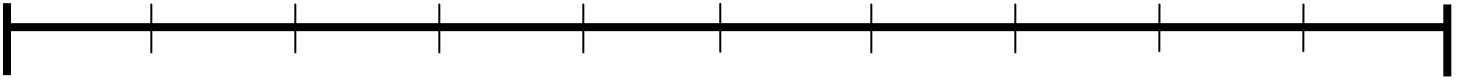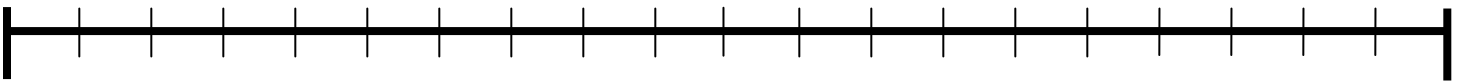
3.

3 + 8 = _____	9 + 5 = _____	Comparison Statement

```
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
0    1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19  20
```

4.

8 + 8 = _____	6 + 4 = _____	Comparison Statement

```
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
0    1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19  20
```

5.

5 + 8 = _____	7 + 9 = _____	Comparison Statement

```
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
0    1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19  20
```