



MISSISSIPPI
EXEMPLAR
Units & Lessons
MATHEMATICS

Grade 2

Grant funded by:



Lesson 4: Secret Six II

Focus Standard(s): 2.NBT.3

Additional Standard(s): 2.NBT.1

Standards for Mathematical Practice: SMP.4, SMP.6, SMP.7

Estimated Time: 50 minutes

Resources and Materials:

- Magnificent Math (a stuffed animal superhero used during the lesson as a motivational tool)
- Place Value Flip Book created with 6 different colors paper per student
- Handout 4.1: Hidden Numbers
- Handout 4.2: Number Portrait
- Handout 4.3: Number Portrait Task Cards
- Number Portrait:

http://www.firstpalette.com/Craft_themes/Alphabet_and_Numbers/Number_Portrait/Number_Portrait.html

Lesson Target(s):

- Students will be able to identify a 3-digit written number in relationship to the number of objects it represents as well as its place value and vice versa.
- Students will be able to identify a 3-digit written number in relationship to its expanded notation as well as the words that form the number and vice versa.

Guiding Question(s):

- Why is it important to represent numbers in different ways?
- Where do you find numbers represented in the real world? What form are they represented in?


Vocabulary

Academic Vocabulary:

- Base Ten
- Expanded Form

Instructional Strategies for Academic Vocabulary:

- Introduce words with student-friendly definition and pictures
- Model how to use the words in discussion

<ul style="list-style-type: none"> ● Place Value ● Place Value Form ● Value ● Written Form 	<input type="checkbox"/> Read and discuss the meanings of words in a mathematical context
Symbol	
	Instructional support and/or extension suggestions for students who are EL, have disabilities, or perform well below the grade level and/or for students who perform well above grade level
✓	Assessment (Pre-assessment, Formative, Self, or Summative)
Instructional Plan	
<p>Understanding Lesson Purpose and Student Outcomes: Students will be able to read and write number words for numbers 0–1000. Furthermore, students will gain the skill of identifying, modeling, and recording three-digit numbers in expanded form, standard form, and number word form.</p> <p>Anticipatory Set/Introduction to the Lesson: Hidden Numbers Display Magnificent Math in students’ view. Remind students that their mission today is to achieve today’s learning goals in order to free Magnificent Math from captivity. Display Handout 4.1: Hidden Numbers and call on students to come to the board and circle a number between 1 and 50. Ask students if there were any differences in the numbers. (size, font, color, etc.)</p> <p>Activity 1: Number Portrait Display the image from Handout 4.2: Number Portrait or use the website First Palette. Distribute copies of Handout 4.2: Number Portrait. Group students and explain that they will find the hidden numbers in the portrait to match the Hidden Number task cards. Explain that they will place the task cards face side down, in the center of their group. Students turn over one card at a time. Each student will find and circle the digits on their Number Portrait that will make the number displayed on the card. They may use each digit only once. If they do not have the digits to make the number, they pass on that number. Play ends when no group member can circle a complete number (SMP.7).</p> <p>Activity 2: Place Value Flip Book Note: Prior to the activity, create a Place Value Flip Book as an example for your students.</p>	

Allow the students to create their own Place Value Flip Books using their own creativity. Closely monitor the student efforts. Allow the students to choose their own number or assign them a number, if necessary. Instruct students that they must have the title, Place Value, on the front of their flip book and their number in standard form.

The other pages must include a representation of their number in the following forms (they may choose any order they would like): expanded form, word form, place value form, number line, and modeling (SMP.4, SMP.6).

For students who are EL, have disabilities, or perform well below grade-level:

- Students will be paired with a student for peer coaching.
- Provide base ten blocks to model before drawing in the flip book.

Extensions for students with high interest or working above grade level:

- Encourage students to quiz one another to see if they recognize the number based on a form other than standard form.

Note: Samples for the flipbook can be found [here](#).

Reflection and Closing:

- ✓ Students will complete an Emoji Exit Ticket indicating how the student feels they did on the lesson. Students will draw the emoji that best describes their feelings about their learning gains.
- ✓ Choose a number for students to represent in two ways.

Note: If today's learning goals were successfully met, release the Magnificent Math. The MVP of today's learning goals is given Magnificent Math to protect. Magnificent Math may sit on his/her desk, He/She may take the superhero to recess, lunch, specials, etc. He/She may also take the superhero home for the night. Be sure to discuss the rules of receiving Magnificent Math. The stuffed animal may not become a distraction to others, and it must be returned the following day.

Homework

No homework given.

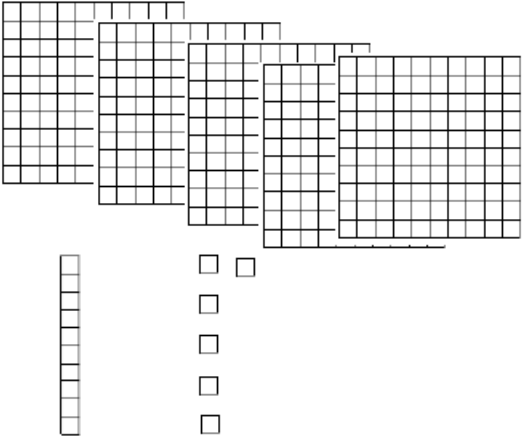
Handout 4.1: Hidden Numbers



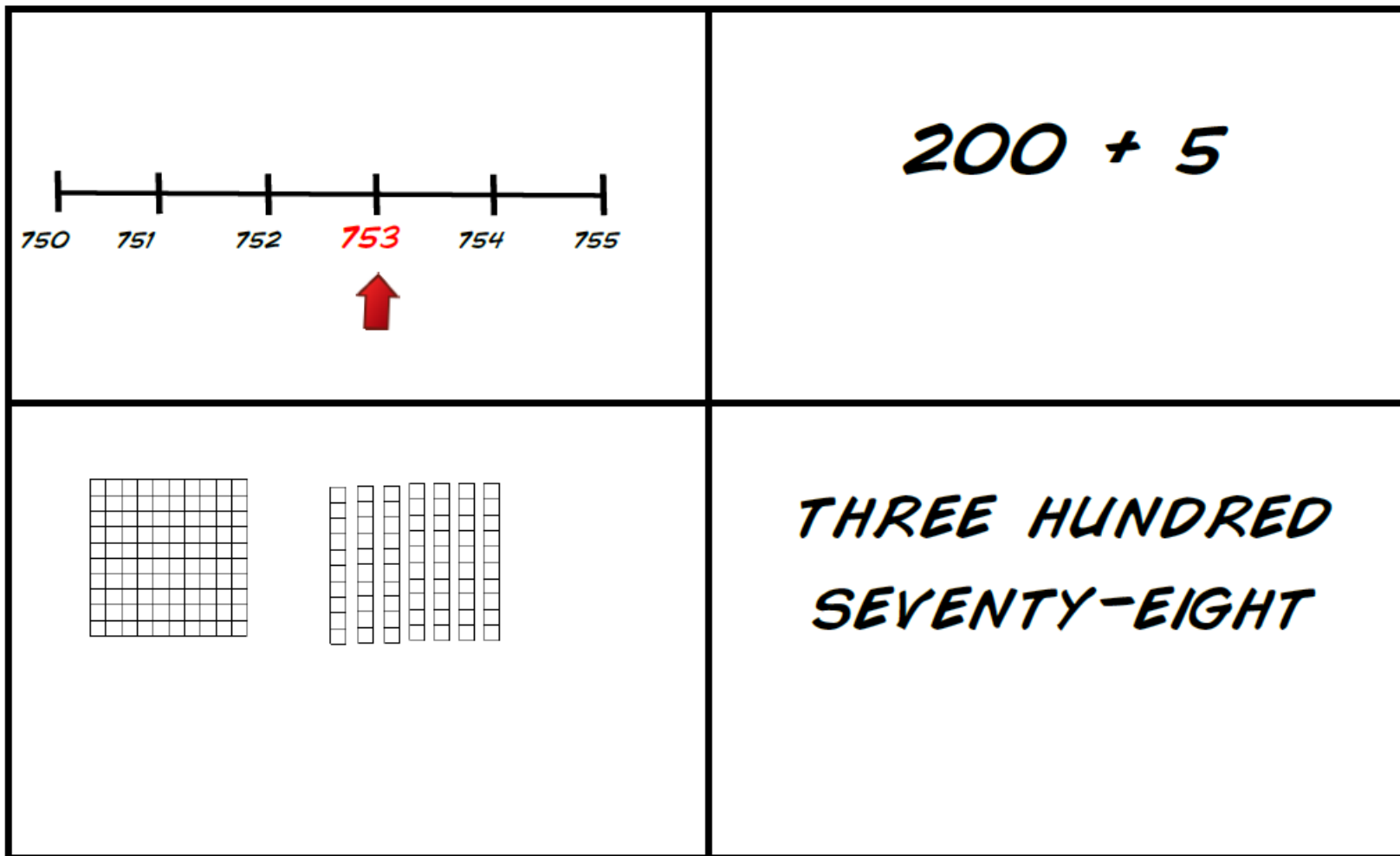
Handout 4.2: Number Portrait



Handout 4.3: Number Portrait Task Cards

<p><i>NINE HUNDRED NINETY-NINE</i></p>	<p><i>400 + 20 + 9</i></p>
	<p><i>2 HUNDREDS, 9 TENS, 1 ONE</i></p>

Handout 4.3: Number Portrait Task Cards



For training or questions regarding this unit,
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