Place Value (2nd)

We use digits to write numbers.

(interactive) →

___ ___ ___

The value of a digit is determined by its place!

2	3	5
hundreds	tens	ones

(attach real blocks)

How can we compare numbers?

☐ > ☐ is greater than

☐ < ☐ is less than

☐ = ☐ is equal to

What are different ways to write numbers?

Written form	Expanded form
three hundred forty-two	300+40+2
Model form	3 4 2 (hundreds tens ones)

Standard form 342

How can you represent a number in different ways?

\#

(Put student drawings here.)

Standards and Mathematical Practices

1. We will explain to others how place value helps us understand numbers.
2. We will represent numbers using words, models, expanded form, and standard form.

Inquiry Chart

What we know about place value	What we want to learn about place value

A

UNIT PLANNING TOOL

Focus: 2nd Grade: Understand Place Value

CCSSM: 2.NBT.1 *3 digit numbers represent hundreds, tens and ones*

a. Bundle of ten tens= 1 hundred
b. 100, 200, 300 = __ hundreds 0 tens 0 ones

2.NBT.2 *Count within 1,000; count on, count back, 5's, 20's, 100's*

2.NBT.3 Read and write #s to 1,000 using base-ten numerals, number names and expanded form

2.NBT.4 Compare two three-digit numbers based on place value using > = <

Math Practices being emphasized:

- Construct viable arguments and critique the reasoning of others
- Model with mathematics

Essential Questions

Why should we understand place value?
What is the difference between place and value?
How does the value of a digit change when its position in a number changes?

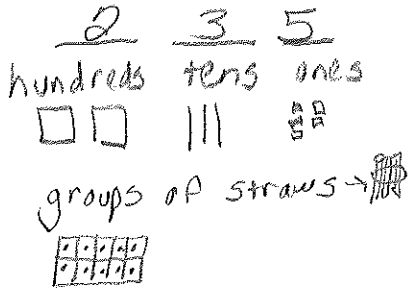
Demo Formative Assessments

Number Talk – Observation
Individual preassessment (paper/ pencil)

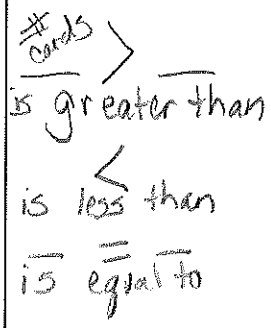
Key Concepts

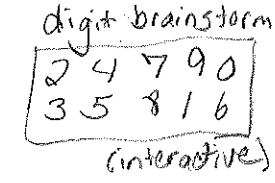
Conceptual understanding of ones, tens and hundreds
Skip counting patterns
Reading and writing numbers
Comparing numbers using place value understanding

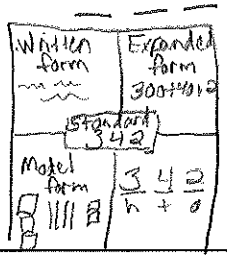
Visual Models of Concepts



Algorithms/Diagrams/Visuals







Connections (Real World Applications)

Understanding the relative size of numbers around you (65 kids are watching the movie)

Helps you understand how our number system works

Helps you to be able to add and subtract big numbers

Vocabulary

hundreds	tens	ones	skip count	base-ten
expanded form	greater than	less than	equal to	digit
compare	number line	bundles	value	place
number form	represent	number names (one, two, thirty…)		

Language Functions/Structures

(#) is ___ hundreds, __ tens and __ ones.

There are ___ tens in (#).

We estimate there are ___ _____.

I modeled (#) using _____.

___ is greater than ___.

___ is less than ___.

___ is equal to ___.

Focus and Motivation

Brain Pop Jr. – *What is place value?* (movie), Belly Up Comic

YouTube: *Place Value Song for Kids* by Numberock Math Songs
Let's Get Fit (number review counting to 100) by Jack Hartmann

Literature – *Missing Math: A Number Mystery* by Loreen Leedy

Chant – Hey Kids (Let's Count Today)

Games: Circle Counting Game – (Stepping Stones Lesson 6)
Guess My Number: Twenty Questions
I Have, Who Has? Place Value 1-2
Close, Far and In Between (Van de Walle)