

Date: 2/16

Standards:

**1.NBT.B.2** Understand that the two digits of a two-digit number represent amounts of tens and ones.

**1.NBT.C.4** Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models of drawings and strategies based on place value, properties of operations; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

Standard for Mathematical Practice:

SMP1: Make sense of problems and persevere in solving them

SMP2: Reason abstractly and quantitatively

SMP4: Model with Mathematics

SMP5: Use appropriate tools strategically.

SMP7: Look for and make use of structure (place value).

SMP8: Look for and express regularity in repeated reasoning (pattern in adding multiples of 10).

K: Place value

Value vs. digits

Tens & ones

Expanded form

U: Students will understand that only like things can be added (tens+tens, ones+ones)

Students will understand that numbers can be broken apart to make addition more clear: $28+12 = 28 + 10 + 2$

Students will understand that different strategies can be used to solve the same problem

D: The students will be able to verbally explain how they solved a 2-digit addition problem

The students will be able to model strategies to solve a 2-digit addition problem

The students will be able to show the role of place value in 2-digit addition (tens+tens, ones+ones)

Whole Class:

1. Work on adding numbers with Base 10 ( $36+20$ ,  $75+10$ ,  $35+30$ , etc...).
2. Talk about: when you add, do you see a pattern? (only tens are added, ones remain the same)

3. As students add numbers, have 1 student show it on the Hundreds chart and 1 student model the open number line to continue to connect and review the strategies.

Small Group MATH Rotations:

**M** – Math Games – Popsicle Stick Addition (using 2 cans of popsicle sticks – 1 can with random 2 digit numbers and the other can with numbers of multiples of 10 – 10, 20, 30, 40). Students draw a stick from each can, show them with base 10 blocks and add them together. Differentiate with different levels of sticks – higher groups choose 2 sticks from the can with random 2 digit numbers, while students that are struggling may only have sticks with 10 and 20 on them. Recording sheets for problems to be handed in.

**A** – All By Myself – Using a math problem given to them ( $14+20$ ), students draw a picture and write a story problem to go with it.

**T** – Teacher Time – Differentiated instruction (based on readiness) with Base 10 blocks

**H** – Hmmm...- 100 Board Scrabble (Use blank 100 board and tiles 1-100, play like scrabble where players choose 7 pieces, place one random number on the board to begin, players may play only one piece at a time (which must touch another piece already on game board).

Formative Assessment/ Check for Understanding: Recording sheet from Popsicle Stick activity and story problem.