Math: Unit 14Adding and Subtracting 10’s and 1’s March 17-21, 2014

(1out of a 2 Week Duration)

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| **Content Objective:** * [1.NBT.4](https://www.dropbox.com/s/bgolk7oqne02ojb/1.NBT.4%20Unwrapped%20document.docx?dl=1). 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 or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; 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.
* [1.NBT.5](https://www.dropbox.com/s/8augsq1b1hvxgfx/1.NBT.5%20Unwrapped%20document.docx?dl=1). Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
* [1.NBT.6](https://www.dropbox.com/s/w0wj1q7xa6u6sqv/1.NBT.6%20Unwrapped%20document.docx?dl=1). Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
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| **WARM UP: (problem of the day, etc) 10-15 MIN.**TW guide students to complete calendar activities: (using complete sentences) day of the week, month of the year, discuss specials of the day, sing songs about the days of the week and months of the year, quick images, counting incorporating tallies and/or graphs |
| **COMPUTATIONAL FLUENCY PRACTICE/Discussions: 10-15 MIN.*** Skip counting by 2s, 5s, and 10s forwards and backwards
* Number of the Day – Students discuss number patterns explaining using complete sentences how problem of the day was solved
* **Number Talks (Combinations 6-10, fact fluency 1-10)**

Unit 14 Review, Week 1, Days 1-5 |

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| **Materials Needed:**hundreds charts, number lines, base-10 models/place value blocks, Unit 14 Formative Assessment, Practice Set 1, Practice Set 2, Practice Set 3, Word Problem Stories. |

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|  **Anchor Chart** | **Focus: Understanding and applying concept of 10 to develop foundational place value concepts.** |
| **Background vocabulary to be used by the teacher:**

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| **CONTENT:*** Multiples of 10
* Place value
* Property of Operations
* Mentally

 | **SKILLS:*** Subtract
* Explain reasoning

Use models and drawings |

**Vocabulary:** * Multiples
* Addition
* Subtraction
* Place value
* Relationships
* Property of operations:((commutative is 4+2 = 2+4)

(associative: see example below)The picture below illustrates that it does not matter whether or not we add the 1 + 7 first (like the left side) or the 7 + 5 first, like the right side. Picture of Associative Property* Picture of Associative Property
* (a + b) + c = a + (b + c) – Yes, algebraic expressions are also associative for addition
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| **Mathematical Practices:**MP1: Make sense and preserveMP2:Abstract/quantitative reasoningMP 3: Construct argumentsMP 4: Model with math MP 5: Use appropriate tools **MP 6: Attend to precision** **MP 7: Make use of structure** MP8: Regularity/repeated reasoning |

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| **TEACHER BACKGROUND**

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| **CONTENT:*** Multiples of 10
* Place value
* Property of Operations
* Mentally

 | **SKILLS:*** Subtract
* Explain reasoning
* Use models and drawings
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* This unit will focus on student understanding and applying the concept of 10, which will help students develop foundational place value concepts.
* It is critical for students to add and subtract by 10s and 1s without counting.
	+ Prior use of models such as base ten blocks, number lines, and 100s charts helps facilitate this understanding.
	+ It also helps students see the pattern involved when adding or subtracting 10.
* These standards are foundational for future work in subtraction with more complex numbers.
	+ Students should have multiple experiences representing numbers that are multiples of 10 (e.g. 90) with models or drawings. Then they subtract multiples of 10 (e.g. 20) using these representations or strategies based on place value.
* These opportunities develop fluency of addition and subtraction facts and reinforce counting up and back by 10s.
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| **Beginning (introduction/Knowledge Building):****Monday-Friday:** * 1. Review anchor chart
	2. practice adding doubles (2+2, 3+3 …)
	3. identify numbers on a blank 100 chart
 | **Student Engagement Strategies**TPSManipulativesPartnersWriting |

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| **Middle (Investigating/Exploring):****Monday-Tuesday:** (If students are ready to practice on paper/pencil , choose from Practice Set 1)* Review using 100 number chart what is 10 more/less and 1 more/less with **place value mats, base ten blocks, and number charts**. Be sure to use different starting points like 56. 32, etc… not just tens (10, 20, 30, etc.) Encourage the use of concrete.
* Teacher can also model 10 more/less on a **number line**. Teacher should be showing 23, 33, 43 as three ticks on the number line and no longer drawing each individual tick mark. More work with the number line will occur in task 2.
* As students develop proficiency with 10 more/less and 1 more/less using concrete models slowly pull back and move towards computing mentally and have students explain their process for solving

**Note: Some students will not be ready for mental computation. Those students can and should keep using the concrete models. Pushing them out of the concrete before they are ready could actually set their progress back. However, do not confuse this with not challenging students. They still need to be challenged and make lots of mental math models to facilitate the transition from the concrete to abstract.** **Wednesday:**(If students are ready to practice on paper/pencil , choose from Practice Set 2 and 3)Using base-ten/place value blocksmanipulatives have students add 30+10, 70+10, 50+10...**Thursday:**Using place value blocks guide students to solve the following subtraction story problems:* Sam hit the ball 50 feet from the base. Ted hit the ball 30 feet from the base. How much farther did Sam’s ball go? Use models or drawings to help you solve the problem.
* Deena hit the ball 90 feet from the base. Vic hit the ball 40 feet from the base. How much farther did Deena’s ball go? Use models or drawings to help you solve the problem.
* Bob hit the ball 60 feet from the base. Paco hit the ball 50 feet from the base. How much farther did Bob’s ball go? Use models or drawings to help you solve the problem.

**Friday:** (Administer Assessment)**Note: make base ten, 100s chart, and number lines available. This assessment will help you determine how much time you need for task 2.** Aria hit the ball 80 feet from the tee.  Shane hit the ball 60 feet from the tee.  How much farther did Aria’s ball go?  Use models or drawings to help you solve this problem.  Explain your thinking. | **Student Engagement Strategies**TPSManipulativesPartnersWriting |

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| **Level 5: Distinguished Command** | **Level 4: Strong** **Command** | **Level 3: Moderate** **Command** | **Level 2: Partial****Command** |
| Student offers a **clear** justification for how they know the answer.Student needs no assistance in solving the problem, and uses a strategy outlined in 1.NBT.4. | Student offers a clear justification for how they know the answer.Student needs no assistance in solving the problem, **and uses a strategy outlined in 1.NBT.4.** | Student offers a **vague** justification for how they know the answer.Student needs **no** assistance in solving the problem, **but uses a counting all or counting up strategy.** | Student offers no justification for how they know which values are larger.Student needs assistance in solving the problem. |

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| **End (Summary): (ex. Exit ticket, quick write)**Show two facts and ask if it is equivalent.Show a card with the number 17, 28, 42… and ask to say what is 10 more or 10 less. | Student Engagement:T-P-S, Whole group response, partners, independent work |

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| 4 Hour ELD Weekly Lesson Plan | **Week of Lesson:**  | March 17-21, 2014 |
| Time of Daily Lesson: | 9:25-10:05 | Grade Level: | 1st Grade |
| **ELPS (English Language Proficiency Standard):** | [ ]  **I** | **[x]  Il** | **[ ]  III** | **[ ]  IV** | **[ ]  V** |  |
| **Proficiency Level:** | **[ ] PE** | **[ ] E** | **[x]  B** | **[x]  I** |  |  |
| **Time Allocation: 30 min.**  | **Oral English Conversation** |
| **ELP Standard(s)/Performance Indicator(s):** **Student Friendly Language Objective:** | **II-LS-1-HI-5: responding to social conversations by rephrasing and repeating information, asking questions, and expressing one’s thoughts****II-LS-2-HI-2: independently reciting familiar rhymes, songs, chants and text with accurate pronunciation, prosody, voice projection and expression** |
| **VOCABULARY*** Multiples
* Addition
* Subtraction
* Place value
* Relationships
* Property of operations (commutative: 4+2 = 2+4

associative: see example on other lesson plan |  |
| **Materials:** | -Vocabulary picturesSubtraction Math song <http://www.youtube.com/watch?v=j_w4i1pcf7E> |
| LESSON DELIVERY |
| **Monday:**  | TW review vocabulary words using pictures/TPR. SW echo respond to definition and TPR. *use sentence stem; The word \_\_\_\_\_ means\_\_\_*TW use the vocabulary word in an academic sentence.SW echo respond to the sentence.SW use the word in a complete sentence.*use sentence stem; This word is \_\_\_\_\_\_ I have heard it or seen it at \_\_\_. Another way I can use this words in a sentence is \_\_\_\_\_.* TW use inside/outside circle to share the sentences multiple times. |
|  **Tuesday:** | TW review vocabulary words using pictures/TPR. SW echo respond to definition and TPR. *use sentence stem; The word \_\_\_\_\_ means\_\_\_*TW use the vocabulary word in an academic sentence.SW echo respond to the sentence.SW use the word in a complete sentence.*use sentence stem; This word is \_\_\_\_\_\_ I have heard it or seen it at \_\_\_. Another way I can use this words in a sentence is \_\_\_\_\_.* TW use inside/outside circle to share the sentences multiple times. |
| **Wednesday:**  | TW review vocabulary words using pictures/TPR. SW echo respond to definition and TPR. *use sentence stem; The word \_\_\_\_\_ means\_\_\_*TW use the vocabulary word in an academic sentence.SW echo respond to the sentence.TW show video to teach songSW sing the song using correct pronunciation TW ask “what is your favorite part of the song?’SW respond using “My favorite part is \_\_\_. I like it because \_\_\_\_. |
|  **Thursday:**  | TW review vocabulary words using pictures/TPR. SW echo respond to definition and TPR. *use sentence stem; The word \_\_\_\_\_ means\_\_\_*TW use the vocabulary word in an academic sentence.SW echo respond to the sentence.TW show video to teach songSW sing the song using correct pronunciation TW ask “what is your favorite part of the song?’SW respond using “My favorite part is \_\_\_. I like it because \_\_\_\_. |
| **Friday:**  | GRADING DAY |

Content Objective:

**1.NBT.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 or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; 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.

*I can use manipulatives and pictures to help me solve problems within 100.*

*I can use math strategies to help me solve problems within 100.*

**1.NBT.5** Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

*I can find 10 more or 10 less in my head.*

[**1.NBT.6**](https://www.dropbox.com/s/w0wj1q7xa6u6sqv/1.NBT.6%20Unwrapped%20document.docx?dl=1)**.** Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

*I can subtract multiples of 10 under 100 and explain what I did.*

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Word Problem 1

Sam hit the ball 50 feet from the base. Ted hit the ball 30 feet from the base. How much farther did Sam’s ball go? Use models or drawings to help you solve the problem.

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Explain your thinking.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Word Problem 2

Deena hit the ball 90 feet from the base. Vic hit the ball 40 feet from the base. How much farther did Deena’s ball go? Use models or drawings to help you solve the problem.

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Explain your thinking.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Word Problem 3

Bob hit the ball 60 feet from the base. Paco hit the ball 50 feet from the base. How much farther did Bob’s ball go? Use models or drawings to help you solve the problem.

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Explain your thinking.