Utah Core Essential Elements and Range of Complexity Examples for Mathematics

First Grade

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http://schools.utah.gov/sars/Significant-Cognitive-Disabilities.aspx

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COMMON CORE ESSENTIAL ELEMENTS AND COMPLEXITY EXAMPLES FOR FIRST-GRADE

First Grade Mathematics Standards: Operations and Algebraic Thinking

CCSS Grade-Level Clusters	Common Core Essential Elements	Range of Complexity Examples
Represent and solve problems involving addition and subtraction. **1.OA.1.** Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	**EE1.OA.1.a.** Use language to describe putting together and taking apart, aspects of addition and subtraction.	**Students will:** **EE1.OA.1.a.** Use words like take away, subtract, give, add, more, and same quantity when putting together and taking apart. Ex. When gathering and distributing classroom supplies, appropriately use words like "more" and "take away" (handing out paper, pencils, or other tools used in a lesson). Ex. When picking teams for P.E., use language such as "I need one more student" or "I need to take away one more from my team." Ex. Request "one more" or "take away" one or more when the teacher has set up an activity where there is an uneven number of supplies. Ex. During an activity, use "add," "more," "less," etc. to indicate when a different amount is needed. **Students will:** **EE1.OA.1.a.** Use language to describe putting together and taking apart, aspects of addition and subtraction. Ex. After the teacher shows six blocks and removes two, label the action as "take away" or informal language with the same meaning. Ex. Appropriately use "more" and "give" to express desire for more snacks or blocks. Ex. Use one-to-one correspondence to line up two sets of objects and ask which group has more/less. Ex. During practice of adding __ more to a numeral, show correct flashcard when asked, "I have two; who has two more (four)?" **Students will:** **EE1.OA.1.a.** Put together or take away. Ex. Take away one crayon from the box. Ex. Put together red blocks and green blocks when asked. Ex. Give coins to purchase an item or take change at end of purchase.

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		Ex. Give the teacher two blocks and then two more blocks. **Students will:** **EE1.OA.1.a.** Follow directions to put together or take away an object with a verbal prompt. Ex. In a classroom routine and when presented with a component needed for the routine, give component(s) when asked to put together for the activity. Ex. Take a paper or object from peer when passed out. Ex. Offer paper or object to peer to put together with group's work when collected at the end of the lesson.
	EE1.OA.1.b. Recognize two groups that have the same or equal quantity.	**Students will:** **EE1.OA.1.b.** Create two groups that have the same or equal quantity. Ex. Fill two book bags with five books each. Ex. Put an equal number of chairs at two tables. Ex. Count out and pass books/material in groups of two items to each student at beginning of lesson. **Students will:** **EE1.OA.1.b**. Recognize two groups that have the same or equal quantity. Ex. When presented with two groups of items, indicate if they have the same quantity. "Are they equal?" Ex. During an art activity, recognize that everyone has an equal amount of supplies (everyone has two googly eyes, one sheet of paper, and one glue stick). Ex. While playing a game with dice, recognize when the same quantity is rolled on each die. Ex. Given three groups of objects arranged on the table, two with the same number of objects, one with a different number of objects, identify which two sets of objects are the same/equal. **Students will:** **EE1.OA.1.b.** Add one more to a group to make it the same or equal to the

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		other. Ex. At the request of the teacher, add one more object to make the groups equal after the teacher makes two groups of objects, one group having two objects and one group only one object. Ex. Add one more chair at the request of the teacher when there are two students and one chair. Ex. Use 10 frames to add beans to a quantity to make one more in order to match the teacher model. Ex. Add one more student to a group to play a game or complete a cooperative group with teacher prompts. **Students will:** **EE1.OA.1.b.** Replicate a group of objects. Ex. Given two blocks and shown a model of two blocks together, duplicate the model. Ex. Given the outline of two circles, place two disks on the circles to duplicate the model.
1.OA.2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	**EE1.OA.2.** Use "putting together" to solve problems with two sets.	**Students will:** **EE1.OA.2.** Use "putting together" to solve problems using three sets. Ex. Given a simple story that presents a problem involving three sets, put the sets together to make one (e.g., John went to a party and brought one gift, Karen went to the party and brought two gifts, Tom went to the party and brought one gift; how many gifts did they have altogether?). Ex. Put together objects to solve a problem (e.g., Sarah put two apples in the basket, Javier put three apples in the basket, Sasha put one apple in the basket; how many apples are in the basket?). Ex. Draw objects next to a vertical addition problem to solve. Ex. Utilize a pictorial math program on the computer to solve for three quantity addition problems. **Students will:** **EE1.OA.2.** Use "putting together" to solve problems with two sets. Ex. Take attendance for a group of five or fewer students. Determine

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		number of boys and number of girls. Put together number of boys and girls to determine how many classmates total. Ex. Using name cards, determine for a group of five or fewer students the number of children who want to buy lunch from the cafeteria, and the number of children who brought a sack lunch. Put together the number of students eating lunch. Ex. Line up for special class on numbers on classroom floor and tell how many students are in line. Ex. Use counting sticks to solve a problem. **Students will:** **EEI.OA.2.** Use "putting together" to solve a problem with one set and adding one more. Ex. Given a set of counting bears (fewer than five), put together one more to make the next number. Ex. When cleaning up the activity center, "put together" the toys, to make the next number (e.g., "I have two blocks. Can you put them together with one more to make three?"). Ex. Use the dry erase board to solve a problem by adding one more. **Students will:** **EE1.OA.2.** Put in an item from a group, using technology or objects. Ex. Drop one more bean bag into a bucket with a verbal prompt. Ex. Drop one ping-pong ball into a Pringles can with a hole cut into its lid. Ex. Follow directions to add one counting block to a group.
Understand and apply properties of operations and the relationship between addition and subtraction. **1.OA.3.** Apply properties of operations as strategies to	**EE1.OA.3.** N/A	

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add and subtract.[3] *Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a 10, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)*		
1.OA.4. Understand subtraction as an unknown-addend problem. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8. Add and subtract within 20.*	**EE1.OA.4.** N/A (See EENBT.1.4 and EENBT.1.6.)	
Add and subtract within 20. **1.OA.5.** Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	**EE1.OA.5.a.** Use manipulatives or visual representations to indicate the number that results when adding one more.	Students will: EE1.OA.5.a. Indicate the numeral that results when adding one more to the numbers. Ex. With nine beads on the string, indicate "10" after adding one more. Ex. After taking attendance, indicate how many students are present when adding one more student. Ex. Stand on large floor number line, determine how many, and then add one more to determine sum. Ex. Use table number line to line up counting sticks, then add one more to each.

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[3] Students need not use formal terms for these properties.

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		Ex. When teaching time to the hour, teacher says, "It is 2:00," and points to clock. "What time will it be in one hour?" **Students will:** **EE1.OA.5.a.** Use manipulatives or visual representations to indicate the number that results when adding one more. Ex. There are four crackers on the table. "If I add one more, how many will I have?" Answer is five. Ex. If three children are sitting at the table with four chairs, indicate "four" when asked, "How many will we have when Linda arrives?" Ex. Using tokens as positive reinforcement, teacher points out that the student has five tokens, then adds one more and asks how many. **Students will:** **EE1.OA.5.a.** Indicate the numbers that result when adding one more to the numbers from one to five. Ex. Add one more to a set of four objects. Ex. When presented with four beads on a string, add one more. Ex. While following steps to play a game, add one more card to a set of cards. **Students will:** **EE1.OA.5.a.** Do or give one more. Ex. When asked, hand or give the teacher one more block. Ex. When asked, clap one more time. Ex. Use a Big Mac switch to request one more song, turn, or item with teacher prompt. Ex. In adaptive P.E., perform one more exercise, ball throw, etc. upon request. Ex. Look at a block when asked to give one more.
	EE1.OA.5.b. Apply knowledge of "one less" to subtract one from the	**Students will:** **EE1.OA.5.b.** Indicate the numeral that is one less. Ex. With 14 beads on the string, indicate "13" after subtracting one.

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numbers.		Ex. Shown 10 beads on a string and asked, "What is one less?", indicate "nine."
		Ex. After taking attendance, indicate how many students are present after one student goes home.
		Ex. Given a vertical number sentence, draw objects to match first number and then cross out the corresponding amount of the second number to arrive at difference.
		Ex. Point to the number left when 10 students are standing in a line and one sits down.
		Ex. Listen to the teacher read *10 Little Monkeys Jumping on the Bed* and tell how many are left at each page.
		Students will:
		EE1.OA.5.b. Apply knowledge of "one less" to subtract one from the numbers.
		Ex. Identify the number remaining when one object is taken away from a group of six objects arranged on the table.
		Ex. Given five tasks to complete, tell how many tasks are left to complete before lunch as the teacher checks each off the list.
		Ex. Tell how many chairs are left each time when playing musical chairs as the teacher takes away one chair each time.
		Ex. Using a computer with touch screen and math software to click and drag objects one at a time away from total, determine how many are left each time an object is dragged away from the total set.
		Students will:
		EE1.OA.5.b. Indicate how many are left when one is taken away from two to four objects.
		Ex. With four counting cubes, take away one to leave three counting cubes.
		Ex. When presented with four beads on a string, take away one and indicate how many are left.

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		Ex. Given four quarters, spend one at the school store and then tell the teacher how many quarters are left in bank. Ex. Using materials presented at a table, each student takes one as the group counts backwards. **Students will:** **EE1.OA.5.b.** Remove or take one away. Ex. Erase one mark from a group of two on a dry erase board. Ex. Take away one counting bear from a group of three. Ex. Take one block from a group of two.
1.OA.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 − 4 = 13 − 3 − 1 = 10 − 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 − 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	**EE1.OA.6.** N/A	
Work with addition and subtraction equations.	**EE1.OA.7.** N/A (See EE1.OA.1.b.)	

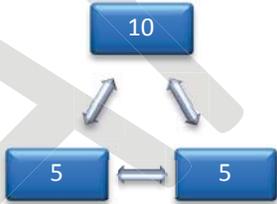| CCSS Grade-Level Clusters	Common Core Essential Elements	Range of Complexity Examples
1.OA.7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 − 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.		
1.OA.8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = _ − 3, 6 + 6 = _.*	**EE1.OA.8.** N/A	

First Grade Mathematics Standards: Number and Operations in Base Ten

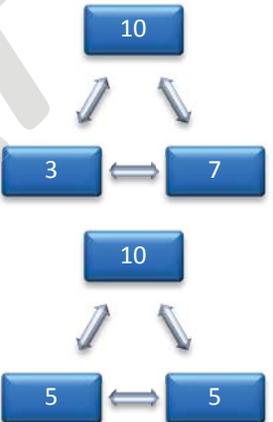| CCSS Grade-Level Clusters	Common Core Essential Elements	Range of Complexity Examples
Extend the counting sequence. **1.NBT.1.** Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	**EE1.NBT.1.a.** Count by ones.	**Students will:** **EE1.NBT.1.a.** Count from 1 - 30 with meaning; cardinality. Ex. Participate in a classroom chant to count numbers 1 – 30. Ex. Recite the count sequence 1 – 30. Ex. Sing numbers to 30. **Students will:** **EE1NBT.1.a.** Count by ones. Ex. Participate in a classroom chant to count numbers 1 – 20. Ex. Recite the count sequence 1 – 20. Ex. Sing numbers to 20. **Students will:** **EE1.NBT.1.a.** Count to 10. Ex. Participate in a classroom chant 1 -10. Ex. Recite numbers 1-10. Ex. Sing numbers 1-10. **Students will:** **EE1.NBT.1.a.** Count to two. Ex. Sing numbers up to two with teacher. Ex. Count along using a voice output communicative device that will count in order (1-2) upon each activation. Ex. Activate a pre-programmed sequenced communication device repeatedly to recite the numbers one and two.
	EE1.NBT.1.b. Count as many as 10 objects and represent the quantity with the corresponding numeral.	**Students will:** **EE1.NBT.1.b.** Count up to 20 objects and represent the quantity with a numeral. Ex. Count a number of dots on a card and write or select the corresponding numeral. Ex. Count the number of names on the attendance chart and write the corresponding number up to 20.

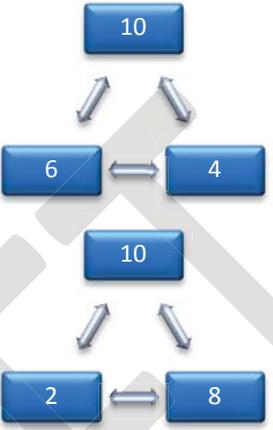| CCSS Grade-Level Clusters	Common Core Essential Elements	Range of Complexity Examples
		Ex. Count up number of pennies/tokens in bank at end of day and record on balance sheet. Ex. Using two 10 frames, count out disks in a bag and record result to classroom graph. **Students will:** **EE1.NBT.1.b.** Count as many as 10 objects and represent the quantity with the corresponding numeral. Ex. Teacher will show the student numeral nine and ask him/her to give the teacher that many blocks. Ex. When shown the number five, count five crayons. Ex. Match a numeral card to a group of objects. Ex. Write or draw the numeral that corresponds with the number of counting sticks. **Students will:** **EE1.NBT.1.b.** Count as many as five objects and/or represent the quantity with the appropriate numeral. Ex. Tap objects while counting. Ex. During teacher-led counting/clapping routine, clap once for each number the teacher recites. **Students will:** **EE1.NBT.1.b.** Count up to two objects. Ex. Use tapping, switching, blinking, clapping, chanting to count two objects. Ex. Hand items to peer one at a time, while peer counts. Ex. Use eye gaze with large number line to look at each number as teacher counts.
Understand place value. **1.NBT.2.** Understand that the two digits of a two-	**EE1.NBT.2.** Create sets of 10.	**Students will:** **EE1.NBT.2.** Create multiple sets of ten with an odd number of objects (remainders). Ex. Given a bowl of 27 counting bears and baggies, put 10 at a time in each

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digit number represent amounts of tens and ones. Understand the following as special cases: ▪ 10 can be thought of as a bundle of ten ones — called a "ten." ▪ The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. ▪ The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).		baggie and leave the leftovers in the bowl. Ex. Given a box of 32 paperclips and envelopes, put 10 at a time in each envelope. Ex. Use a 10 compartment egg carton to count out 10 pennies to exchange for a dime. Put remainders back in bank. **Students will:** **EE1.NBT.2.** Create sets of 10. Ex. Given 20 crayons, divide them into two sets of 10. Ex. Given 30 playing cards, pass out 10 cards to three players. Ex. During calendar, students count out 10 straws to represent 10 days in school and bundles them and moves the bundle to the tens place pocket. Ex. Five students work cooperatively to count out 10 pennies each, combine and roll for the bank. **Students will:** **EE1.NBT.2**. Create one set of 10 to match another set of 10. Ex. Create one set of 10 using a jig, model, or template to match another set of 10. Ex. Given a set of 10 objects arranged in a row, make another row of 10 objects. Ex. Given a hula hoop, group a set of 10 beanbags in it. Ex. Count out enough toy rings for each of 10 fingers and put them on and check for accuracy. Ex. Make a "bean stick" by counting out 10 beans and gluing them on a popsicle stick to match a model. Ex. Access a switch that says "stop" or "that's it" when watching or listening to another individual arrange sets or groups of 10. **Students will:** **EE1.NBT.2.** Identify a set of five. Ex. Select a set of five objects from a choice of two or more sets.

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		Ex. Choose from a set of markers and a set of crayons. (Exposure to vocabulary: set) Ex. Choose from two sets of pictures the one that matches the model set of five.
1.NBT.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	**EE1.NBT.3.** Compare two groups of 10 or fewer items when the quantity of items in each group is similar.	**Students will:** **EE1.NBT.3.** Choose the larger/smaller set of items that are <10, >10 when the sets differ by three or fewer. Ex. Given two stacks of books, identify which set has <10, >10. Ex. Given two pencil boxes, identify which pencil box contains <10, >10 pencils. Ex. Given two stacks of cups, identify which set has <10, >10. Ex. Given two class lines of students, identify which set has <10, >10. **Students will:** **EE1.NBT.3.** Compare two groups of 10 or fewer items when the quantity of items in each group is similar. Ex. Given two pencil boxes, one with five and one with 10 pencils, identify which pencil box contains the smaller set of items. Ex. Given one set of cubes with 1-4 cubes, and a second set of cubes with 6-10, identify the set with less than five. **Students will:** **EE1.NBT.3.** Choose the matching set of items. Ex. Given three pencil boxes, identify which two pencil boxes contain the same number of items. Ex. Given three bracelets, match a second set of three bracelets from two choices. Ex. Given one set of counting cubes with 1-4 cubes, and a second set of counting cubes with 6-9 cubes, identify the larger set. **Students will:** **EE1.NBT.3.** Match sets of one, two, or three objects .showing the same number of objects. Ex. Given three sets of objects of one or two objects, match the two

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		showing the same number.
Use place value understanding and properties of operations to add and subtract. **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.	**EE1.NBT.4.** Compose numbers less than or equal to five in more than one way.	**Students will:** **EE1.NBT.4.** Compose numbers less than or equal to 10 in more than one way. Ex. Given a bowl of pennies, and make sets of 10 with different numbers of pennies. Ex. Given lanyards or string and two colors of beads, create bracelets with varying combinations of 10 colored beads (one bracelet with 10 blue beads, one bracelet with five blue beads, five red beads, etc.). Ex. Using a triangle graphic organizer, place random amounts of manipulatives in two base angles and move/combine them at the top and count how many. 10 5 5 **Students will:** **EE1.NBT.4.** Compose numbers less than or equal to five in more than one way. Ex. Given a set of red counting cubes and a set of green counting cubes, create a set of only red, a set of only green, and a set of mixed red and green totaling five in each case. Ex. Given a five-piece inset puzzle and two trays, take out and sort the puzzle pieces into the trays in more than one way. Ex. Place colored macaroni pieces on each number on a number line up to five in any combination, then string. Ex. Shake two sizes of markers or painted beans in a cup and spill. Ask students to count each color and then count all together. Ex. Draw circles and squares to make five in any combination. Ex. Use a muffin pan with five wells to place one colored block in each

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		well, then count to find total. **Students will:** **EE1.NBT.4.** Identify (subitize) sets of one to three objects. Ex. Given a set of two stickers and a set of three stickers on a page, find the set of three stickers when asked for three. Ex. Given a domino with one dot and a domino with three dots, locate the domino with one dot when asked for one. Ex. Given sets of one to three objects, indicate the set with three objects when asked for three. If the student counts, teacher asks again for three and reinforce, "This is three." Ex. Teacher holds up 1-3 fingers and asks how many. If student counts, teacher asks again for final number and reinforce, "This is three." **Students will:** **EE1.NBT.4.** Repeat the number of objects in sets of 1-3 objects. Ex. Watch as the teacher uses one scarf, saying, "I have one scarf. How many?" Ex. Attend to a finger-play of "Three Little Monkeys" told with finger-puppets and repeats how many monkeys. Ex. Repeat when teacher says how many eyes, nose, ears, mouth, etc. he/she has. Ex. Point to or indicate items of clothing as teacher counts how many (e.g., "I have two shoes. How many shoes?" "I have one hat. How many hats?" "I have two mittens. How many mittens?" "I have one coat. How many coats?").
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.	**EE1.NBT.5.** N/A (See EE1.OA.5.a and EE1.OA.5.b.)	

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1.NBT.6. 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.	**EE1.NBT.6.** Decompose numbers less than or equal to five in more than one way.	**Students will:** **EE1.NBT.6.** Decompose numbers less than or equal to 10 in more than one way. Ex. Given 10 or fewer bean bags and two baskets, toss bean bags into baskets creating different sets each time using a dry erase board. Ex. Given 10 or fewer counting blocks, arrange them into two different group combinations. Ex. Given a triangle graphic organizer with up to 10 manipulatives in the tip, separate the total into two (any size) groups in the base angles. 10 3 ⟺ 7 10 5 ⟺ 5

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		Ex. Ask students how many ways they can create 10 cents. **Students will:** **EE1.NBT.6.** Decompose numbers less than or equal to five in more than one way. Ex. Given five books, divide them into two groups in more than one way. Ex. Given five matchbox cars and two cardboard "garages," "park" the cars in the garages in varying ways. (First time, student may put two cars in one garage and three cars in the other garage, and teacher asks, "Can you do it a different way this time?" and student continues to distribute the cars in varying ways.) Ex. Given five counting blocks, divide them into two groups in more than one way. Ex. Use teacher-made dice to roll combinations totaling up to five. Ex. Play a finger game where two students put up random number of fingers on one hand each to create five. If they do, the students' team earns a point. Ex. Use a dry erase board to decompose numbers less than five in more than one way. **Students will:**

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		EE1.NBT.6. Decompose numbers less than or equal to five in one way. Ex. Given a handful of blocks (up to five), separate into two piles in any order. Count and label each pile with teacher assistance. Ex. Sort up to five items into two groups. Ex. Given a group of five tokens composed of two different colors, count out total, sort with teacher by color and count each group. **Students will:** **EE1.NBT.6.** Identify two sets of the same object (less than five) as they are being decomposed. Ex. Asked to find the same item as shown somewhere else in the room, bring two of the same items together to make a bigger set. Ex. Repeat as the teacher decomposes two objects into two groups (e.g., Teacher has two balls, rolls one to the students. Teacher says, "You have one ball, I have one ball. How many balls do you have?" Student rolls it back at prompt. Teacher says, "Now, I have two balls. " How many balls do I have?" Repeat with various combinations.). Ex. Repeat as the teacher decomposes two counting bears on the table in a pile (e.g., Teacher says, "Here are two bears. How many bears are there? Take one. Now there is one bear on the table. How many bears are on the table now?"). Ex. Repeat as the teacher decomposes two books (e.g., Teacher counts aloud the number of books as they are handed to each student. Teacher says, "There are two books. How many books are there? Here is one for you. How many books do you have? Here is one for you. How many books do you have?").

First Grade Mathematics Standards: Measurement and Data

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Measure lengths indirectly and by iterating length units.	EE1.MD.1-2. Use appropriate vocabulary to describe the length of an	**Students will:** **EE1.MD.1-2.** Measure and compare two similar objects aligned at the same starting point, and describe which is longer/shorter, taller/shorter.

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1.MD.1. Order three objects by length; compare the lengths of two objects indirectly by using a third object. **1.MD.2.** Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. *Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.*	object using the language of longer/shorter, taller/shorter.	Ex. Indicate who is taller and who is shorter when two students stand side by side. Ex. Measure the height of their desks and the height of the teacher's desk with interlocking cubes and then lay them down horizontally side by side on a table to compare. Ex. Use footprints to measure off length of classroom versus hall and state which is longer/ shorter. Ex. Use a string to measure two objects and tell which is longer. **Students will:** **EE1.MD.1-2.** Use appropriate vocabulary to describe the length of an object using the language of longer/shorter, taller/shorter. Ex. Given two pieces of string placed side by side, use "longer" and "shorter" to describe their relative lengths (e.g., "Look at these two objects and tell me about their length"). Ex. Given two pencils laid side by side, use "longer/shorter" to describe each one. Ex. Given two different kinds of objects that are similar in all attributes except for length (e.g., pencil to marker), but one is significantly longer than the other, tell which is longer. **Students will:** **EE1.MD.1-2.** With guidance and support, select from two everyday objects based on the stated attribute (long/short, tall/short). Ex. Using a model, select the one that is shorter from two options (e.g., using two sets of pictures the teacher says "Here are two boys. This one is shorter." "Here are two dogs. Show me the shorter one."). Ex. Point to or indicate, in a picture showing two story characters standing side by side, the one that is taller (e.g., "In the story, Bob is taller than Joe. Look at the picture. Which one is taller?"). Ex. Using a model of a bar graph, select the bar that is taller on a second graph (e.g., using two bar graphs, the teacher says "Here is the taller bar on this graph." Show a second bar graph of daily temperatures and say,

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		"Which bar is taller?"). Ex. After being shown one boot and one shoe, identify the "tallest." **Students will:** **EE1.MD.1-2.** Explore tall/short objects. Ex. Focus on the short and tall objects when the teacher is presenting a story about long and short. Ex. Explore soft blocks (one tall, one short) on their wheelchair tray, while teacher says and demonstrates, "Reach up high to touch the tall block. Now touch the short block." Ex. When presented with a model, use clay to make a "long snake" and a "short snake" and compare them. Ex. First sit and then stand to explore short and tall (e.g., "Stand up; now you are tall. Sit down; now you are short").
Tell and write time. **1.MD.3.** Tell and write time in hours and half-hours using analog and digital clocks.	**EE1.MD.3.a.** Demonstrate an understanding of the terms "tomorrow," "yesterday," and "today."	**Students will:** **EE1.MD.3.a.** Use the words "today," "tomorrow," and "yesterday" to refer to personal activities and events. Ex. Using lunch menu, answer questions such as, "What did you have for lunch yesterday?", "What did you eat today?", and "What will you have tomorrow?" Ex. Use classroom calendar to find today's activities, after being shown yesterday's. Ex. Complete a graphic organizer by placing index card with day of the week written on it and place it in the correct column under "Yesterday," "Today," or "Tomorrow". Ex. Find "Today" in monthly planner when given date by teacher and point to it. Move finger backward and forward to find "Yesterday" and "Tomorrow." **Students will:** **EE1.MD.3.a.** Demonstrate understanding of the terms "tomorrow," "yesterday," and "today." Ex. Indicate yesterday, today, or tomorrow when teacher asks about a

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		favorite activity and when it happened or will happen. Ex. Given a classroom calendar, find a picture of an activity that fits with "What happens tomorrow?" Ex. Given a calendar, find "Today" and place a sticker on it. Ex. Find "tomorrow's" lunch choice on cafeteria monthly menu. **Students will:** **EE1.MD.3.a.** Indicate understanding of the term "today." Ex. When shown two picture cards or math cue cards of daily activities, select the event that happens today. Ex. During calendar activity, answer the question, "Show me today on the calendar. What is the weather like today?" Ex. Indicate "today" by pointing to the correct day of the week, drawing a line from it to the correct day of the week, or circling the day from a field of three options. **Students will:** **EE1.MD.3.a.** Identify an activity that will take place "today." Ex. Indicate a preference when asked and shown the play items, "Yesterday you played with the blocks. Do you want to play with the blocks or the balls today?" Ex. Attend to class discussion during calendar and then choose pictured activities for today on cards to place on their visual schedule.
	EE1.MD.3.b. Name a day of the week for tomorrow and yesterday.	**Students will:** **EE1.MD.3.b.** Using a calendar, recall the seven days of the week and identify the appropriate day for tomorrow and yesterday. Ex. Answer correctly when teacher asks, "If today is Monday, what day is tomorrow?" Ex. Answer correctly when teacher asks, "If yesterday was Friday, what day is today?" Ex. Fill in the blanks to complete sentences with index cards with the names of the days on them (i.e., Yesterday was _____, today is _____, and tomorrow will be _____.).

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		Students will: **EE1.MD.3.b.** Name a day of the week for tomorrow and yesterday. Ex. Use a calendar to determine the day before and the day after today. Ex. Given today, identify what tomorrow is. Ex. Answer correctly the question, "If today is Tuesday, what is tomorrow?" Ex. Answer correctly the question, "If today is Monday, what was yesterday?" **Students will:** **EE1.MD.3.b.** Name a day of the week. Ex. Names the days of the week, but not in order. Ex. When asked, identify today. Ex. Sing a "Days of the Week" song. Ex. Answer questions such as "What day do you go to church?" or "What day do we cook?" by naming the day of the week. **Students will:** **EE1.MD.3.b.** Identify an activity that is happening today. Ex. Indicate one activity on a picture schedule when asked, "What are we doing today?" Ex. Indicate that today is a school day. Ex. During art class, identify a paint brush as the tool needed for today's activity when presented with a choice of paintbrush and a sock. Ex. Look at visual schedule and using picture symbol, indicate the music symbol to represent the current activity.
	EE1.MD.3.c. Identify activities that come next, before, and after.	**Students will:** **EE1.MD.3.c.** Correctly sequence the activities given the direction to identify what comes next, before, and after in the day's or week's schedule. Ex. Identify what is the first activity of the day, and then identify what comes after that.

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		Ex. Given an activity such as going out to recess, correctly sequence three picture cards from the daily schedule illustrating getting ready to go outside. Ex. Sequence 3-4 events in a story with picture cues. Ex. Repeat a three-step direction and then carry it out (i.e., First, I ___, next, I ___, and last, I ___.) **Students will:** **EE1.MD.3.c.** Identify activities that come next, before, and after. Ex. Given a personal schedule, answer questions such as, "What do we need to do next?" Ex. Given digital camera pictures of a child engaged in the day's activities, answer questions such as, "What did you do before lunch today? What did you do next? What did you do after you after that?" Ex. Use a calendar to identify next, before, and after. Ex. Sequence a set of pictures depicting a shoe tying or jacket zipping routine. Ex. At the end of the day, teacher asks students to sequence the day's events to include in the parent communicator. Ex. Use a visual schedule or sequence cards to complete an activity that offer first, second, and third steps. **Students will:** **EE1.MD.3.c.** Indicate activities that come next. Ex. Given a daily schedule listing the day's activities, answer the question, "We just finished lunch. What happens next?" Ex. When participating in a transition routine (moving from one activity to a new activity), indicate the next activity. Ex. Tell the next step in a familiar activity (e.g., teacher communicates classroom routines consistently and then asks students questions to reinforce the learning by asking, "What step comes next to turn in work?"). Ex. Use the classroom schedule to indicate what happens next (e.g., after

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		timer rings to end an activity, the teacher asks students, "What happens next?" and refers to the classroom schedule). Ex. Given a pattern with two repetitions, identify the "next" object in the pattern sequence. **Students will:** **EE1.MD.3.c.** Recognize the next activity. Ex. Using a picture schedule, identify the next activity by indicating the next picture. Ex. Using a First/Then graphic with self-sticking non-adhesive pictures, remove the First picture when the task is done. Ex. When shown a three-part illustration of an activity with a before-during-after sequence, indicate which of the actions comes next. Ex. Given a picture schedule, choose the next activity picture to indicate what is next. Ex. Pull the self-sticking non-adhesive picture off the schedule at the end of the activity and point to the next activity pictured.
	EE1.MD.3.d. Demonstrate an understanding that telling time is the same every day.	**Students will:** **EE1.MD.3.d.** Demonstrate an understanding of telling time with a clock or watch related to real-life context. Ex. Indicate from a set of tools (e.g., ruler, measuring cup, watch) what you will use to know when it is time for lunch. Ex. Match noon on an analog clock to lunch. Ex. Choose pictures of different style clocks and watches and put into a category, rejecting distracter pictures. Ex. Match a picture of a clock to a clock and tell what a clock is used for. Ex. Match the current time on a clock with the appropriate activity from a picture schedule. Ex. Point to various activities and their corresponding times on clocks that have been posted with corresponding activities on the classroom bulletin board. **Students will:**

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		EE1.MD.3.d. Demonstrate an understanding that telling time is the same every day.
		Ex. Show the schedule for today and tomorrow side by side. When teacher indicates we went to lunch at noon today, indicate we will go to lunch at noon tomorrow.
		Ex. Teacher announces the time to go home every day. Then, the teacher announces the time and asks, "What happens every day at this time?"
		Students will:
		EE1.MD.3.d. Demonstrate an understanding of the use of a clock (time).
		Ex. Indicate the use of a clock when asked what tool is needed to tell time.
		Ex. Indicate a clock when asked what tool is needed to help you awake from a night's sleep.
		Ex. Look at the clock, repeat the time after the teacher, and follow the teacher directions when the teacher models, using "think alouds," by announcing various times throughout the day.
		Ex. After listening to stories about time, answer questions to demonstrate an understanding of time.
		Ex. Use objects for transitioning to predict time of day (e.g., spoon represents lunch, backpack represents home, book represents reading/language)
		Students will:
		EE1.MD.3.d. Recognize representations of different parts of the day; morning, noon, and night.
		Ex. Point to a picture of a bed when prompted.
		Ex. Point to a picture of a sunrise when prompted.
		Ex. Point to a clock when prompted.
		Ex. Points to food pictures to indicate mealtimes.

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Represent and interpret data. **1.MD.4.** Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	**EE1.MD.4.** Given a count of the total number of data points in two categories, determine whether there are more or less in each category.	**Students will:** **EE1.MD.4.** Collect and count data into at least two categories to answer questions about the total number of data points and whether there are more or less in one category than in another. Ex. Collect data from a class vote and categorize it to determine the category with the most votes (e.g., the class takes a vote, counts the vote, and decides which choice won). Ex. Collect data about class choices and categorize the count to determine which is the favorite (e.g., hot lunch choices, milk choices, any activity where you are counting and tallying in two or more choices). Ex. Attend to a bar graph of daily temperatures in winter and determine if there were more days of indoor or outdoor recess. **Students will:** **EE1.MD.4.** Given a count of the total number of data points in two categories, determine whether there are more or less in each category. Ex. Given a graphical display of data (lunch count) of the number of data points in each category, determine whether there are more or less in each category (e.g., did more students buy cheese sandwich). Ex. Given a pictograph of the number of boys and girls in class, choose the group with more. Ex. Stand next to one of two books for class to vote on what book to read during story time. After teacher counts each group, determine which book won. **Students will:** **EE1.MD.4.** Put objects and choices into categories. Ex. Given a picture of the type of drink (e.g., chocolate milk, plain milk, juice), place their choice on a lunch chart to represent the number who wants each type of drink. The teacher counts the number of each drink choice on the chart. Ex. Tape a paper doll to attendance chart to represent oneself (e.g., Each girl has a paper doll representing "girl" and each boy has one representing

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		"boy." After students tape their dolls to the attendance chart, the teacher counts the number of boys and the number of girls on the chart). Ex. Using a dry erase board, enter a tally into the appropriate column provided by the teacher (e.g., preferred activity of story reading versus block counting, etc.). Ex. Drop one marble into a "yes" or "no" can to answer a question. The teacher counts the number of marbles and the correct answer is revealed. Ex. Use a classroom clicker system to respond to questions, one vote/response per person. **Students will:** **EE1.MD.4.** Participate in data collection by voting or otherwise choosing. Ex. Indicate pencil or crayon when asked, "Do you like pencils or crayons better?" Ex. Indicate preference (vote) when asked, "Who wants to play outside?"

First Grade Mathematics Standards: Geometry

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Reason with shapes and their attributes. **1.G.1.** Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes. **1.G.2.** Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.[4]	**EE1.G.1.** Identify common two-dimensional shapes: square, circle, triangle, and rectangle.	**Students will:** **EE1.G.1-2.** Identify attributes of common two-dimensional shapes: square, circle, triangle, and rectangle. Ex. Given shapes of different sizes, and orientations, sort by shape attribute. Ex. Given a triangle and asked, "How many sides does a triangle have?" Indicate three. **Students will:** **EE1.G.1-2.** Identify common two-dimensional shapes: square, circle, triangle, and rectangle. Ex. Given an array of shapes, identify the shape when asked. Ex. Given a picture, identify common shapes within the picture. Ex. Given a card with a shape on it, answer, and "Is this a square?" **Students will:** **EE1.G.1-2.** Match shape to shape. Ex. Match a two-dimensional shape to a two-dimensional shape in their environment. Ex. Given a shape puzzle, complete the puzzle. **Students will:** **EE1.G.1-2.** Recognize a shape. Ex. Given a circle and asked "Show me circle," point to the circle. Ex. Given a card with a shape, point to the shape.
1.G.3. Partition circles and	**EE1.G.3.** Put together two	**Students will:**

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[4] Students do not need to learn formal names such as "right rectangular prism."

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rectangles into two and four equal shares, describe the shares using the words *halves*, *fourths*, and *quarters*, and use the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as *two of*, or *four of* the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.	pieces to make a shape that relates to the whole (i.e., two semicircles to make a circle, two squares to make a rectangle).	**EE1.G.3.** Demonstrate part and whole terminology understanding. Ex. Given an array of half shapes such as tangrams, select two and put them together to make a circle, square, or triangle. Ex. On an interactive whiteboard, move two squares together to form a rectangle and them take them apart again. **Students will:** **EE1.G.3.** Put together two pieces to make a shape that relates to the whole (i.e., two semicircles to make a circle, two squares to make a rectangle). Ex. Put together two parts of a circle to create a whole circle. Ex. Put two squares together to form a rectangle. Ex. Given half of an index card with a partial shape or picture, find a peer who has the other half to make a complete shape or picture. **Students will:** **EE1.G.3.** Put together two pieces. Ex. Using an inset puzzle as a model, put together a whole circle from half-circle puzzle parts. Ex. Given a template, put together two pieces to form a whole. Ex. Using plastic eggs, practice breaking apart into two equal parts, and put together to make a whole. **Students will:** **EE1.G.3.** Given an inset puzzle or technology equivalent, insert a shape. Ex. Using a one-shape puzzle, insert missing piece. Ex. While using shape-based chart, student inserts shape into open slot. Ex. Match a paper cut-out shape to an outline on picture and glue. Ex. Use a touch window to click and drag a shape from shape bank to insert into outline in picture.