Unit 1: Counting (4 Weeks)

Content Standards:
● 1.OA.A.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. ● 1.OA.B.3 Apply properties of operations as strategies to add and subtract.2 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 ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) ● 1.OA.C.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). ● 1.NBT.A.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. ● 1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. ● 1.MD.C.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.
Practice Standards :
Students will have opportunities to: ● Choose appropriate tools. **(MP5. 1)** ● Use tools effectively and make sense of your results. **(MP5.2)** ● Explain your mathematical thinking clearly and precisely. **(MP6.1)** ● Use an appropriate level of precision for your problem. **(MP6.2)** ● Use clear labels, units, and mathematical language. **(MP6.3)** ● Think about accuracy and efficiency when you count, measure, and calculate. **(MP6.4)**

Concepts from Previous Units Supporting Unit 1:	**Big Ideas, Concepts, & Strategies for Unit 1:**	**Connections to Upcoming Concepts after Unit 1:**
<u>The following concepts are prerequisites for this unit which were learned in kindergarten:</u> - A number is made up of two or more parts. - A number can be decomposed into its parts. - Numbers are related to each other through a variety of relationships. For example 6 is one more than five and is four less than 10. - Counting tells how many things are in a set. - When counting a set of objects, the last word in the counting sequence names the quantity for that set. - Addition can be thought of as placing two or more quantities together. - Subtraction can be thought of as taking an amount away from a given quantity. - Objects can be classified into different categories using identified attributes.	- Counting On/Back are strategies for addition and subtraction. - Counting can be connected to addition and subtraction. - Addition and subtraction can be used to solve simple word problems. - Numbers can be compared using comparative language such as “greater than”, “less than”, “larger than”, and “smaller than”. - When counting by tens, the next number in the sequence is “ten more”. - Skip-counting by fives and tens are efficient ways of counting. - Charts are used to organize data to help answer questions. -	- When you add two numbers in any order, you’ll get the same answer. - Subtraction is a missing-addend problem. - Addition and subtraction can be used to solve word problems involving situations such as “adding to” and “taking from”. - Two numbers may be compared by examining the amount of tens and ones in each number using words, models, and symbols greater than (>), less than (<), and equal to (=). - Data can be displayed in a tally chart or a bar graph to help answer questions.

Vocab.	**Bold- listed in teacher’s edition** **compare, count, count back, count up, data, estimate, number grid, number line, number story, skip counting, solve, tallies, tally chart, tally mark,** organize, more, less, greater than, less than, larger than, smaller than, unknown, sum, difference, tens, data point Normal- not listed in teacher’s edition as a vocabulary word but will be helpful for students in explanations

Math Routines: It's important to go over norms and routines of mathematics instruction in the first week of school. Review expectations for discussion in mathematics. Set up procedures for how to manage and engage with math manipulatives. Set up the format for conducting Number Talks and implementing math tasks. Explain how to work with a partner.

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Lessons:	Learning Objective(s):	Student Objective(s):	Math Vocabulary & Tools:	Implement Math Task(s) from EDM TE Vol 1:	Supplemental Math Task Options:	Guiding Questions & Strategies to Support Struggling Learners:	Select Practice Opportunities:	Implement Mental Number Sense Routine: (Write in Plans)
1.1	1. Count to 120 by ones. 2. Read numbers from 0 to 120.	1. I can count to 120. 2. I can read numbers from 0 to 120.	**Vocabulary in the Launch:** -about -count **Tools:** -about 15 counters in a baggie **Vocabulary in the Summarize:** -estimate	- Math Task TE pg. 53 - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	-Supplemental Math Task - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	- Ask guiding questions such as: *Do you think there are more than 50? Less than 50? More than 30? Less than 30? How did you count? Is there another way? Is there an easier way to count? Does your count make sense? Is it close to your prediction? What is the difference?*	-Exploring Dot-Dice Patterns TE pg 51 -Activity Card 1, MM p. 2 -Activity Card 2	- Establish norms and expectations for Number Talks - Explain the format of a Number Talk - Start with dot images: EDM4 Quick Look Cards 4, 5, 6, 8, 19, 9 16, 18 and 25 can be done during a Number Talk
1.2	1. Count to 120 by ones. 2. Count to 120 by tens. 3. Count forward from any given number less than 120 to 120. 4. Read numbers from 0 to 120.	1. I can count to 120. 2. I can understand groups of ten. 3. I can read numbers from 0 to 120. 4. I can count to 120 by tens.	**Vocabulary in the Launch:** -number line **Tools:** -number line -counters -unifix cubes **Vocabulary in the Summarize:** -skip counting	-Modified Math Task TE pgs. 58-59 - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	N/A	- Ask guiding questions such as: *What is the problem asking? What are you stuck on? How can you use _____ to show the problem? How can you prove that to me? How did you count? Is there another way? Is there an easier way to count? Does your count make sense? How can you show your counting on a number line?*	-Ordering Numbers TE pg. 57 -Activity Card 3 -Activity Card 4 -Monster Squeeze MM pg G2-G3, G-4	
1.3	1. Count forward from any given number less than 120 to 120. 2. Count to 120 by ones.	1. I can count forward from any given number. 2. I can count to 120.	**Vocabulary in the Launch:** -count **Tools:** -pennies -dice **Vocabulary in the Summarize:** N/A	-MM pg. G5; TE pgs. 66-67 (teacher directions) - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	N/A	- Ask guiding questions such as: *What is the problem asking? What are you stuck on? How can you use _____ to show the problem? How can you prove that to me? How did you count? Is there another way? Is there an easier way to count? Does your count make sense?* Monitoring Student Work Tool	-Activity Card 5 -Activity Card 6, MM p. TA2	
1.4	1. Count to 120 by ones. 2. Represent a number of objects with a written numeral 0 to 120.	1. I can count to 120.	**Vocabulary in the Launch:** -estimate -count **Tools:** -counters **Vocabulary in the Summarize:** N/A	- MJ pg. 1 (Making Estimates TE pgs. 69-70 can be done in the Launch to get students ready for the math task) - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	-Supplemental Math Task - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	- Ask guiding questions such as: *What is the problem asking? What are you stuck on? How can you use _____ to show the problem? How can you prove that to me? How did you count? Is there another way? Is there an easier way to count? Does your count make sense?*	-Penny Dice Game -Monster Squeeze Game -Bunny Hop Game, MM pg. G7, TE pg. 80	

1.5	1. Use counting on to add within 20. 2. Use counting back to subtract within 20. 3. Solve addition within 20 word problems involving situations with putting together with unknowns in all positions. 4. Solve subtraction within 20 word problems involving situations with taking from with unknowns in all positions.	1. I can solve word problems with an unknown number. 2. I can represent a word problem.	**Vocabulary in the Launch:** -number stories -unknown **Tools:** -number line -counters **Vocabulary in the Summarize:** N/A	- Modified Math Task TE pg. 79 - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	-Supplemental Math Task - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	- Ask guiding questions such as: *What is the problem asking? What are you stuck on? How can you use _____ to show the problem? How can you prove that to me? How did you find the unknown amount? How can you represent your thinking using a picture or an equation?*	-Passing the Basket of Pennies, TE pg. 77 -Practicing Counting: Zip Down to Zero! TE pg. 77 -Activity Card 7	
1.6	1. Compare two two-digit numbers based on meanings of the tens and ones digit. *Supports the above learning target but includes single digit numbers to review kindergarten concepts.	1. I can compare numbers.	**Vocabulary in the Launch:** -compare -more -less **Tools:** -counters **Vocabulary in the Summarize:** -greater than, less than symbols	- Modified Math Task TE pg. 85 - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	-Supplemental Math Task 1 -Supplemental Math Task 2 - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	- Ask guiding questions such as: *What is the problem asking? What are you stuck on? How can you find out who has more? Less? How can you use linking cubes to compare the amounts? How many more? How many less? How can you use the less than or greater than symbols to show the comparison?*	-Comparing Cube Counts, TE pg. 83 -Activity Card 8, MM pg. 9 -MM pg. 10 -Top-It, MM G8	
1.7	1. Organize data up to three categories. 2. Represent data up to three categories. 1. Ask and answer questions about the total number of data points.	1. I can organize numbers into categories. 2. I can ask and answer questions about data. 3. I can represent data.	**Vocabulary in the Launch:** -tally chart -categories **Tools:** -MM pg. 11 **Vocabulary in the Summarize:** N/A	-Math Task TE pgs. 91-91 & MM pg. 11 - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	-Supplemental Math Task - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	- Ask guiding questions such as: *How can you organize the information? What do the tally marks represent? How can you use the tally marks to count efficiently? How did you count the data points? What information can you add to the table to help readers understand the data?*	-Whisper-and-Shout -Counting by 5s, TE pg. 89 -Activity Card 9 -Activity Card 10 -Penny Dice Game -Numbers Are Everywhere, MM pg. 13	
1.8	1. Organize data up to three categories. 2. Represent data up to three categories. 3. Ask and answer questions about the total number of data points.	1. I can organize numbers into categories. 2. I can ask and answer questions about data. 3. I can represent data.	**Vocabulary in the Launch:** -data points -tally chart -categories -most -least **Tools:** **Vocabulary in the Summarize:** N/A	- Math Task TE pgs. 97-98 - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	N/A	- Ask guiding questions such as: *How can you organize the information? What do the tally marks represent? How can you use the tally marks to count efficiently? How did you count the data points? What information can you add to the table to help readers understand the data?*	-Answering Questions about Weather -MM pg. G12-G13 -MM pg. 14 -MM pg. G10-G11 -Top-It Game -MM pg. 15	
1.10	1. Solve addition within 20 word problems involving situations with putting together with unknowns in all positions. 2. Solve subtraction within 20 involving situations with comparing unknowns in all positions. 3. Use objects to represent the addition/subtraction word problem. 4. Use drawings to represent the addition/subtraction word problem. 5. Use equations with a symbol for the unknown number to represent the addition/subtraction problem	1. I can solve word problems with an unknown number. 2. I can represent a word problem.	**Vocabulary in the Launch:** -number stories -unknown **Tools:** -counters or unifix cubes **Vocabulary in the Summarize:** N/A	- Math Task TE pg. 53 - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	-Supplemental Math Task - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	- Ask guiding questions such as: *What is the problem asking? What are you stuck on? How can you use _____ to show the problem? How can you prove that to me? How did you find the unknown amount? How can you use counters to represent the problem? How can you represent your thinking using a picture or an equation?*	- Sharing Simple Number Stories TE pg. 109 -Telling Simple Counting Stories -Activity Card 13 -MM pg. TA7-TA8 -Bunny Hop Game -MM pg. 18	

1.11	1. Use counting on to add within 20. 2. Use counting back to subtract within 20. 3. Count to 120 by ones. 4. Count to 120 by tens. 5. Count forward from any given number less than 120 to 120.	1. I can count to 120. 2. I can count to 120 by tens.	**Vocabulary in the Launch:** -skip-count **Tools:** -100 chart or number grid (MM pg. TA9) **Vocabulary in the Summarize:** N/A	-Modified Math Task TE pgs. 58-59 - Observe student thinking during Explore and Summarize portions of the task for **Formative Assessment**	N/A	- Ask guiding questions such as: *How did you count up? How did you count backwards? Is there another way? Which method is more efficient? How can you represent your jumps?*	-Bunny Hop -MM pg. 19 -Coloring Return Sweeps on the Number Grid, TE 113 -Rolling for 50, MM pg. G15	
Administer the Unit 1 Assessment and Open Response Assessment								

Key: MJ = Math Journal; MM = Math Master; MP = Math Practice; EDM = Everyday Math; TE = Teacher's Edition; SRB = Student Reference Book

Language Supports for Mathematics:		
Domains	**Language Objective(s):**	**Sentence Stem(s):**
Speaking	1. I can orally describe the steps I took to solve the problem. 2. I can orally describe my reasoning. 3. I can defend my strategy. 4. I can restate someone else's thinking in my own words. 5. I can compare strategies.	● I need more time to think please. ● I would like to add _____. ● I think what you said is _____. ● This is my strategy _____. ● I agree/disagree with _____ because _____. ● I would _____ instead. ● This makes me think _____. ● The evidence I have is _____. ● What if_____? ● How can that be _____? ● Could you have _____? ● How did you _____? ● Why did you _____?
Reading	1. I can find important information in a word problem. 2. I can summarize the purpose of the word problem.	● The problem is asking me to find _____. ● The purpose of the problem is _____.
Writing	1. I can write to explain my reasoning. 2. I can explain why my strategy works. 3. I can record drawings and equations to show my work.	● The problem is asking me to find _____. First I, _____Next, _____. Finally I found out that _____. My strategy works because _____. ● The problem is asking me to find _____. In the beginning _____. But then, _____. At the end, _____. My strategy works because _____. ● These are the steps I took to find _____. First, _____. Second, _____. Third, _____. I got _____ as my solution. I solved the problem this way because _____. ● The problem is asking me to determine _____. I used the _____ strategy. To solve this problem first I _____. Then, I _____. Next, _____. After that, I _____. Finally I found out that _____. I noticed _____. My strategy works because _____.