Unit Title: **Counting Up!**

Established Goals:

Second Grade Mathematics – Number Sense

2.NS.1: Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number.

2.NS.2: Read and write whole numbers up to 1,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 1,000.

2.NS.3: Plot and compare whole numbers up to 1,000 on a number line.

	Alignment		
Objective	**Standard**	**Performance Assessment**	**Test Item(s)**
Count from 0 – 1,000 by ones, twos, fives, and tens **verbally**	2.NS.1	Rubric Row 3	
Count from 0 – 1,000 by ones, twos, fives, and tens by **writing numbers**.	2.NS.2	Rubric Row 1	Items 1, 2, 3, & 4
Use a number line to count by ones, twos, fives, and tens.	2.NS.3	Rubric Row 1 Rubric Row 3	Items 5, 6, & 7
Create a number line that represents counting by ones, twos, fives, and tens.	2.NS.2 2.NS.3	Rubric Row 1	Items 8 & 9
Use number line (created by student) to explain the difference between counting by ones, twos, fives, and tens.	2.NS.2 2.NS.3	Rubric Row 3	
Know when it is best to count by either ones, twos, fives, or tens in relation to quantities.	2.NS.1		Item 10

Pre-Test

This is just a pre-test! It is a chance to show off what you know about counting! Try your best, but if you do not know an answer, it's okay! This test will not be graded!

Circle the letter next to the answer.

1. What comes next?
   4, 5, 6, 7, ___.
   A. 9
   B. 11
   C. 8
   D. 10

2. What comes next?
   2, 4, 6, 8, 10, ____.
   A. 12
   B. 11
   C. 13
   D. 8

3. What number goes in the blank?
   15, 20, ____, 30, 35, 40.
   A. 21
   B. 22
   C. 32
   D. 25
4. What number goes in the blank?
   20, 30, 40, 50, ____, 70, 80
   A. 55
   B. 52
   C. 60
   D. 65

5. Below, there is a number chart of 0-20. Start with 0 and count by 2s. Circle the numbers that you say when counting as you go.

0	1	2	2	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20

6. Below, there is a number chart of 0-20. Start with 0 and count by 5s. Circle the numbers that you say when counting as you go.

0	1	2	2	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20

7. Below, there is a number chart of 0-30. Start with 0 and count by 10s. Circle the numbers that you say when counting as you go.

0	1	2	2	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30

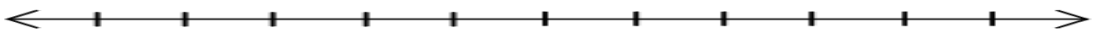
8. Write the correct number in the blank.

34, 35, 36, _____, 38, 39, 40.

9. Write the correct number in the blank.

80, 85, 90, 95, _____, 105, 110, 115.

10. Below is a blank number line. Begin with the first number given, and fill in the blanks by counting by five.



35

What is your favorite way to count numbers? (circle one)

A. By ones
B. By twos
C. By fives
D. By tens

Performance Assessment

Directions: You, and a partner, will create a giant number line! Your number line will be six feet long! On this number line, you must demonstrate how to count by ones, twos, fives, and tens! When your number line is finished, you, and your partner, will share with the class!

Must Haves on Your Number Line:

- Numbers 0-40. (DO NOT Forget 0!)
- Represent counting by ones, twos, fives, and tens.
    - Represent each way of counting a different way.
- Be creative and colorful!

Must Haves when Sharing:

- Tell how you made your number line!
- Explain how your number line shows counting by ones, twos, fives, and tens.
- Take turns sharing with your partner.

Students will be provided with:

- Six foot long piece of bulletin board paper. (Color of their choice.)
- Markers, crayons, colored pencils.
- Pipe cleaners, glue, scissors, stickers.
- Construction paper, string, and stencils.

* This performance assessment will engage learners in number sense, and enhance their ability to count by ones, twos, fives, and tens by creating and using their own number line.

Counting Up! Number Line Project				
	Poor (2pt)	**Fair (3pt)**	**Good (4pt)**	**Excellent (5pt)**
Number Line Content • Numbers 0-40 • Represents counting by ones, twos, fives, and tens.	Number line does not contain numbers 1-40. Number line represents counting by less than 3 of the four ways required.	Number line contains numbers 1-40. Number line represents counting by at least 3 out of the four ways required.	Number line contains numbers 0-40. Number line represents counting by at least 3 out of the four ways required.	Number line contains numbers 0-40. Number line represents counting by all 4 ways required.
Number Line Appearance • Represents ways of counting differently. • Number line is creative and has color.	Number line represents counting less than 3 ways, not represented differently. Number line is made with little color or creativity.	Number line represents counting at least 3 ways, not all ways represented differently. Number line is made with little creativity.	Number line represents counting at least 3 ways, all ways represented differently. Number line is made with creativity and color.	Number line represents counting by all 4 ways required, and all 4 ways represented differently. Number line is made with creativity, color and is unique.
Presenting Number Line • When sharing number line with class: - Takes turns - Explains how number line represents ways of counting. - Explains how number line was made.	Student does not take turns sharing with partner. Student does not do one of the following: shares how number line is made/how number line represents counting.	Student does not take turns sharing with partner. Student shares how number line is made/how number line represents counting at least 3 of the required ways.	Student takes turns sharing with partner. Student shares how number line is made/how number line represents counting at least 3 of the required ways.	Student takes turns sharing with partner. Student shares how number line is made/how number line represents counting all 4 of the required ways.
Total Score:				**___/15**

Unit Test – Counting Up!

Name: _____

Circle the correct answer.

1. What comes next?
   13, 14, 15, 16, ___.
   A. 9
   B. 17
   C. 18
   D. 21

2. What comes next?
   10, 12, 14, 16, 18, ____.
   A. 17
   B. 22
   C. 19
   D. 20

3. What number goes in the blank?
   25, 30, 35, ____, 45, 50
   A. 40
   B. 36
   C. 37
   D. 42

4. What number goes in the blank?
   40, 50, 60, 70, _____, 90, 100
   A. 75
   B. 72
   C. 80
   D. 71

5. Below, there is a number chart of 0-20. Start with 0 and count by 2s. Circle the numbers that you say when counting as you go.

0	1	2	2	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20

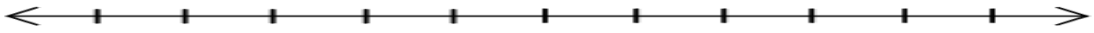
6. Below is a number chart of 65- 85. Start with 65 and count by 5s. Circle the numbers that you say when counting as you go.

65	66	67	68	69	70	71	72	73	74	
75	76	77	78	79	80	81	82	83	84	85

7. Below, there is a number chart of 0-50. Start with 0 and count by 10s. Circle the numbers that you say when counting as you go.

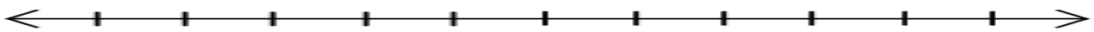
0	1	2	2	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30
	31	32	33	34	35	36	37	38	39	40
	41	42	42	44	45	46	47	48	49	50

8. Below is a blank number line. Begin with the number given, and fill in all of the number marks by counting by **tens**.



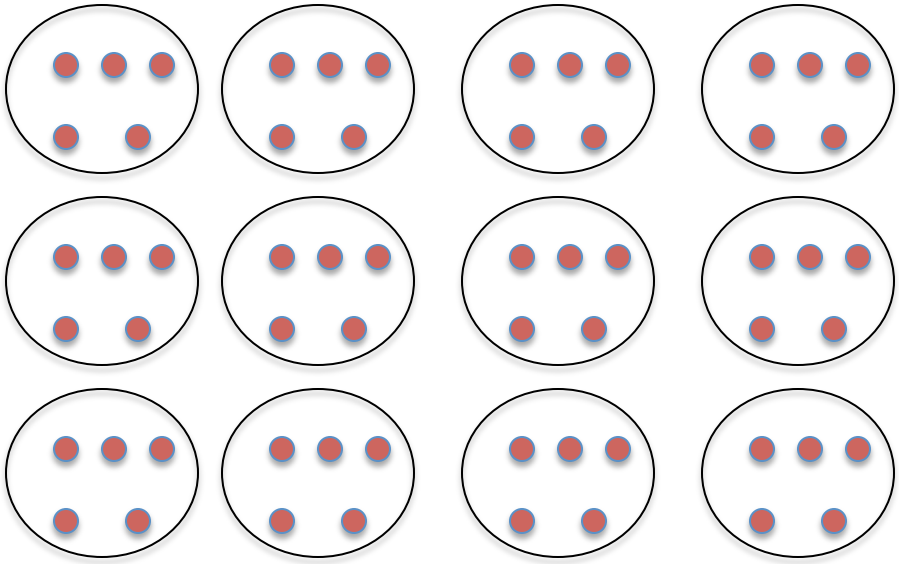
40

9. Below is a blank number line. Begin with the number given, and fill in all of the number marks by counting by **twos**.



104

10. Mark has 12 bags of candy. There are five pieces of candy in each bag. Below is a picture of his candy.



Mark wants to know how much candy he has all together. What is the quickest way to count the bags of candy in order to find out how much candy he has all together?

Write your answer below, and then explain why you chose that way.

Reflection

I have learned many things from creating this assessment unit. I have learned that it takes a great deal of time to create test items and a performance assessment that both align to not only learning objectives, but academic standards as well. In the future, I would like to remember to always allow myself time to create quality assessment items that align to my objectives in more than one-way. I chose to create this assessment unit over a math topic, because I thought it would be a challenge to write a performance assessment for mathematics. I was pleased to find that with a little creativity, it is easy to engage students, hands-on, in any mathematics, learning objective. From this, I will remember that performance assessment does not always have to be a scary speech, but can be fun and engaging for students.