

NZ

Numeracy

Project

## NZ Numeracy Project Progress Monitoring

Point values for each stage and accumulated points across stages

Stage	Number of Points Possible	Accumulated Points
1	12	<b>12</b>
2	14	<b>26</b> (stage 1 + stage 2)
3	16	<b>42</b> (stage 1 + stage 2 + stage 3)
4	24	<b>66</b> (stage 1 + stage 2 + stage 3 + stage 4)
5	27	<b>93</b> (stage 1 + stage 2 + stage 3 + stage 4 + stage 5)
6	? (still being developed)	?

### Setting Goals

By end of kindergarten student should have **42** points (stage 1 + stage 2 + stage 3)

By end of 1<sup>st</sup> grade student should have **66** points (stage 1 + stage 2 + stage 3 + stage 4)

By end of 2<sup>nd</sup> grade student should have **93** points (stage 1 + stage 2 + stage 3 + stage 4 + stage 5)

By end of 3<sup>rd</sup> grade student should have **93** points or more (stage 1 + stage 2 + stage 3 + stage 4 + stage 5 + stage 6)

By end of 4<sup>th</sup> grade student should have **?** points (stage 1 + stage 2 + stage 3 + stage 4 + stage 5 + stage 6)

By end of 5<sup>th</sup> grade student should have **?** points or more (stage 1 + stage 2 + stage 3 + stage 4 + stage 5 + stage 6 + stage 7)

### Testing Procedures

After giving IKAN/GLOSS, if gaps are noted in **any** of the domains, begin the NZ Numeracy Assessment on the lowest stage or one stage lower. If the student demonstrates mastery on all skills for that stage then move on to the next stage up. Continue in like manner until the student shows non-mastery. Assess to the end of the stage where non-mastery is notated in order to accurately calculate the total score.

To calculate total points, automatically give the student credit for all lower stages and then add the points from the highest scoring stage. For example: If a student is unable to master all of the skills in stage 4 then his total points would be an accumulation from stages 1-3 plus the number correct at stage 4.

Subsequent data point assessments (recommended once every 2 or 3 weeks) would assess **ONLY** the areas on which the student previously showed non-mastery. Once mastery is demonstrated for the entire stage then continue assessing at the next highest stage.

Student Name: \_\_\_\_\_ Teacher: \_\_\_\_\_ Grade: \_\_\_\_\_ Tier: \_\_\_\_\_

## NZ Numeracy Assessment - Stage One

**Materials Needed for Assessment:** -Appendices A & B- -2 index cards- -10 counters-

**Directions:** Begin with Skill Number 1:1 and proceed through 1:9 using the materials listed above and the script in the chart below. Indicate in the columns to the right whether or not the student was able to demonstrate the skill. For students not able to demonstrate a specific skill, create an "Intervention Prescription" by selecting activities from the "NZ Numeracy Project Activities List." Give the assessment in its entirety (skill # 1.1 - 1.9) in order to obtain a baseline or data point score to progress monitor the student's progress.

Skill #	Skill Description	Assessment Script		Demonstrated?	
				Yes	No
1:1	Rote counting 0-10 <i>(MCC.K.CC.1)</i>	BL	"Start counting from 0. Stop at 10."		
		DP1	"Start counting from 0. Stop at 10."		
		DP2	"Start counting from 0. Stop at 10."		
		DP3	"Start counting from 0. Stop at 10."		
		DP4	"Start counting from 0. Stop at 10."		
1:2	Saying the forwards and backwards number word sequence in the range 0-10, starting and ending with any number <i>(MCC.K.CC.2)</i>	BL	"Start counting from 2. Stop at 7."		
		DP1	"Start counting from 3. Stop at 8."		
		DP2	"Start counting from 4. Stop at 9."		
		DP3	"Start counting from 2. Stop at 8."		
		DP4	"Start counting from 3. Stop at 9."		
		BL	"Count backwards from 10. Stop at 0."		
		DP1	"Count backwards from 10. Stop at 0."		
		DP2	"Count backwards from 10. Stop at 0."		
		DP3	"Count backwards from 10. Stop at 0."		
		DP4	"Count backwards from 10. Stop at 0."		
		BL	"Count backwards from 8. Stop at 3."		
		DP1	"Count backwards from 9. Stop at 5."		
		DP2	"Count backwards from 7. Stop at 2."		
		DP3	"Count backwards from 8. Stop at 4."		
DP4	"Count backwards from 9. Stop at 3."				
1:3	Numeral recognition 0-10 <i>(MCC.K.CC.3)</i>	BL	Show student the numeral cards 4 & 9 (Appendix A) one at a time. Ask: "What number is this?"		
		DP1	Show student the numeral cards 3 & 8 (Appendix A) one at a time. Ask: "What number is this?"		
		DP2	Show student the numeral cards 2 & 7 (Appendix A) one at a time. Ask: "What number is this?"		
		DP3	Show student the numeral cards 5 & 9 (Appendix A) one at a time. Ask: "What number is this?"		
		DP4	Show student the numeral cards 4 & 6 (Appendix A) one at a time. Ask: "What number is this?"		
1:4	Number order: What comes before and after a given number in the range 0-10 <i>(MCC.K.CC.2)</i>	BL	Show student the numeral card 4 (Appendix A). Ask: "What number comes before?"; "What number comes after?"		
		DP1	Show student the numeral card 6 (Appendix A). Ask: "What number comes before?"; "What number comes after?"		
		DP2	Show student the numeral card 7 (Appendix A). Ask: "What number comes before?"; "What number comes after?"		
		DP3	Show student the numeral card 3 (Appendix A). Ask: "What number comes before?"; "What number comes after?"		
		DP4	Show student the numeral card 5 (Appendix A). Ask: "What number comes before?"; "What number comes after?"		

Student Name: \_\_\_\_\_ Teacher: \_\_\_\_\_ Grade: \_\_\_\_\_ Tier: \_\_\_\_\_

1:5	Ordering the numbers in the range 0-10 (MCC.K.CC.7)	BL	Place number cards (App A) in front of the student out of order. Say: "Please put these cards in number order."		
		DP1	Place number cards (App A) in front of the student out of order. Say: "Please put these cards in number order."		
		DP2	Place number cards (App A) in front of the student out of order. Say: "Please put these cards in number order."		
		DP3	Place number cards (App A) in front of the student out of order. Say: "Please put these cards in number order."		
		DP4	Place number cards (App A) in front of the student out of order. Say: "Please put these cards in number order."		
1:6	Counting sets 0-10 (MCC.K.CC.5)	BL	Place a collection of 5 counters in front of the student. Say: "Count the counters and tell me how many you have."		
		DP1	Place a collection of 8 counters in front of the student. Say: "Count the counters and tell me how many you have."		
		DP2	Place a collection of 6 counters in front of the student. Say: "Count the counters and tell me how many you have."		
		DP3	Place a collection of 7 counters in front of the student. Say: "Count the counters and tell me how many you have."		
		DP4	Place a collection of 9 counters in front of the student. Say: "Count the counters and tell me how many you have."		
1:7	Forming sets 0-10 (MCC.K.CC.4)	BL	Place a collection of 10 counters in front of the student. Say: "Please get me 8 counters."		
		DP1	Place a collection of 10 counters in front of the student. Say: "Please get me 6 counters."		
		DP2	Place a collection of 10 counters in front of the student. Say: "Please get me 7 counters."		
		DP3	Place a collection of 10 counters in front of the student. Say: "Please get me 9 counters."		
		DP4	Place a collection of 10 counters in front of the student. Say: "Please get me 5 counters."		
1:8	Comparing two sets in the range 0-10 (MCC.K.CC.7)	BL	Place a collection of 3 counters on one index card and place a collection of 6 counters on another index card. Ask: "Which card holds more?"		
		DP1	Place a collection of 5 counters on one index card and place a collection of 2 counters on another index card. Ask: "Which card holds more?"		
		DP2	Place a collection of 4 counters on one index card and place a collection of 3 counters on another index card. Ask: "Which card holds more?"		
		DP3	Place a collection of 2 counters on one index card and place a collection of 5 counters on another index card. Ask: "Which card holds more?"		
		DP4	Place a collection of 7 counters on one index card and place a collection of 2 counters on another index card. Ask: "Which card holds more?"		
		BL	Place a collection of 2 counters on one index card and place a collection of 5 counters on another index card. Ask: "Which card holds less?"		
		DP1	Place a collection of 7 counters on one index card and place a collection of 3 counters on another index card. Ask: "Which card holds less?"		
		DP2	Place a collection of 8 counters on one index card and place a collection of 2 counters on another index card. Ask: "Which card holds less?"		
		DP3	Place a collection of 3 counters on one index card and place a collection of 4 counters on another index card. Ask: "Which card holds less?"		
		DP4	Place a collection of 4 counters on one index card and place a collection of 5 counters on another index card. Ask: "Which card holds less?"		
1:9	Recognizing patterns to 5 (MCC.K.OA.1)	BL	Flash each five frame (Appendix B) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?"		
		DP1	Flash each five frame (Appendix B) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?"		

Student Name: \_\_\_\_\_ Teacher: \_\_\_\_\_ Grade: \_\_\_\_\_ Tier: \_\_\_\_\_

	DP2	Flash each five frame (Appendix B) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?"		
	DP3	Flash each five frame (Appendix B) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?"		
	DP4	Flash each five frame (Appendix B) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?"		

**Individual Stage Data:**

Date: _____				
BL: ___/12	DP1: ___/12	DP2: ___/12	DP3: ___/12	DP4: ___/12

*BL = Baseline DP = Data Point*

Student Name: \_\_\_\_\_ Teacher: \_\_\_\_\_ Grade: \_\_\_\_\_ Tier: \_\_\_\_\_

## NZ Numeracy Assessment - Stage Two

**Materials Needed for Assessment:** -Appendices A, C, D, & E- -20 counters-

**Directions:** Begin with Skill Number 2:1 and proceed through 2:11 using the materials listed above and the script in the chart below. Indicate in the columns to the right whether or not the student was able to demonstrate the skill. For students not able to demonstrate a specific skill, create an "Intervention Prescription" by selecting activities from the "NZ Numeracy Project Activities List." Give the assessment in its entirety (skill # 2.1 - 2.11) in order to obtain a baseline or data point score to progress monitor the student's progress.

Skill #	Skill Description	Assessment Script		Demonstrated?	
				Yes	No
2:1	Rote counting 0-20 <i>(MCC.K.CC.1)</i>	BL	"Start counting from 0. Stop at 20."		
		DP1	"Start counting from 0. Stop at 20."		
		DP2	"Start counting from 0. Stop at 20."		
		DP3	"Start counting from 0. Stop at 20."		
		DP4	"Start counting from 0. Stop at 20."		
2:2	Saying the forwards and backwards number word sequence in the range 0-20, starting and ending with any number <i>(MCC.K.CC.2)</i>	BL	"Start counting from 12. Stop at 17."		
		DP1	"Start counting from 13. Stop at 18."		
		DP2	"Start counting from 14. Stop at 19."		
		DP3	"Start counting from 12. Stop at 18."		
		DP4	"Start counting from 13. Stop at 19."		
		BL	"Count backwards from 20. Stop at 0."		
		DP1	"Count backwards from 20. Stop at 0."		
		DP2	"Count backwards from 20. Stop at 0."		
		DP3	"Count backwards from 20. Stop at 0."		
		DP4	"Count backwards from 20. Stop at 0."		
		BL	"Count backwards from 18. Stop at 13."		
		DP1	"Count backwards from 19. Stop at 15."		
		DP2	"Count backwards from 17. Stop at 12."		
DP3	"Count backwards from 18. Stop at 14."				
DP4	"Count backwards from 19. Stop at 13."				
2:3	Numeral recognition 0-20 <i>(MCC.K.CC.3)</i>	BL	Show student the numeral cards 12, 19, and 16 (Appendix C) one at a time. Ask: "What number is this?"		
		DP1	Show student the numeral cards 10, 15, and 17 (Appendix C) one at a time. Ask: "What number is this?"		
		DP2	Show student the numeral cards 16, 11, and 18 (Appendix C) one at a time. Ask: "What number is this?"		
		DP3	Show student the numeral cards 13, 20, and 14 (Appendix C) one at a time. Ask: "What number is this?"		
		DP4	Show student the numeral cards 18, 10, and 15 (Appendix C) one at a time. Ask: "What number is this?"		
2:4	Number order: What comes before and after a given number in the range 0-20 <i>(MCC.K.CC.2)</i>	BL	Show student the numeral card 14 (Appendix C). Ask: "What number comes before?"; "What number comes after?"		
		DP1	Show student the numeral card 16 (Appendix C). Ask: "What number comes before?"; "What number comes after?"		
		DP2	Show student the numeral card 17 (Appendix C). Ask: "What number comes before?"; "What number comes after?"		
		DP3	Show student the numeral card 13 (Appendix C). Ask: "What number comes before?"; "What number comes after?"		
		DP4	Show student the numeral card 15 (Appendix C). Ask: "What number comes before?"; "What number comes after?"		

Student Name: \_\_\_\_\_ Teacher: \_\_\_\_\_ Grade: \_\_\_\_\_ Tier: \_\_\_\_\_

2:5	Ordering the numbers in the range 0-20 (MCC.1.NBT.3)	BL	Place number cards (App A & C) in front of the student out of order. Say: "Please put these cards in number order."		
		DP1	Place number cards (App A & C) in front of the student out of order. Say: "Please put these cards in number order."		
		DP2	Place number cards (App A & C) in front of the student out of order. Say: "Please put these cards in number order."		
		DP3	Place number cards (App A & C) in front of the student out of order. Say: "Please put these cards in number order."		
		DP4	Place number cards (App A & C) in front of the student out of order. Say: "Please put these cards in number order."		
2:6	Counting sets 0-20 (MCC.K.CC.5)	BL	Place a collection of 15 counters in front of the student. Say: "Count the counters and tell me how many you have."		
		DP1	Place a collection of 18 counters in front of the student. Say: "Count the counters and tell me how many you have."		
		DP2	Place a collection of 16 counters in front of the student. Say: "Count the counters and tell me how many you have."		
		DP3	Place a collection of 17 counters in front of the student. Say: "Count the counters and tell me how many you have."		
		DP4	Place a collection of 19 counters in front of the student. Say: "Count the counters and tell me how many you have."		
2:7	Forming sets 0-20 (MCC.K.CC.4)	BL	Place a collection of 20 counters in front of the student. Say: "Please get me 18 counters."		
		DP1	Place a collection of 20 counters in front of the student. Say: "Please get me 16 counters."		
		DP2	Place a collection of 20 counters in front of the student. Say: "Please get me 17 counters."		
		DP3	Place a collection of 20 counters in front of the student. Say: "Please get me 19 counters."		
		DP4	Place a collection of 20 counters in front of the student. Say: "Please get me 15 counters."		
2:8	Comparing two numbers in the range 0-20 using number cards (MCC.1.NBT.3)	BL	Show the student two number cards, 11 & 15 (Appendix C). Ask: "Which number is more?"		
		DP1	Show the student two number cards, 13 & 18 (Appendix C). Ask: "Which number is more?"		
		DP2	Show the student two number cards, 17 & 12 (Appendix C). Ask: "Which number is more?"		
		DP3	Show the student two number cards, 10 & 13 (Appendix C). Ask: "Which number is more?"		
		DP4	Show the student two number cards, 16 & 19 (Appendix C). Ask: "Which number is more?"		
		BL	Show the student two number cards, 9 & 17 (Appendix A & C). Ask: "Which number is less?"		
		DP1	Show the student two number cards, 14 & 12 (Appendix C). Ask: "Which number is less?"		
		DP2	Show the student two number cards, 15 & 11 (Appendix C). Ask: "Which number is less?"		
		DP3	Show the student two number cards, 8 & 16 (Appendix A & C). Ask: "Which number is less?"		
DP4	Show the student two number cards, 11 & 7 (Appendix A & C). Ask: "Which number is less?"				
2:9	Instantly recognizing patterns to 10 (MCC.K.OA.1)	BL	Flash each ten frame (Appendix B) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?"		
		DP1	Flash each ten frame (Appendix B) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?"		
		DP2	Flash each ten frame (Appendix B) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?"		
		DP3	Flash each ten frame (Appendix B) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?"		
		DP4	Flash each ten frame (Appendix B) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?"		
2:10	Solving addition problems to 20 by joining sets and	BL	Have the student hold out their hands. Place 6 counters in one hand. Say: "Here are 6 counters." Place 5 counters in the other hand. Say: "Here are 5 counters." Ask: "How many counters do you have altogether?"		
		DP1	Have the student hold out their hands. Place 7 counters in one hand. Say: "Here are 7 counters." Place 4 counters		

Student Name: \_\_\_\_\_ Teacher: \_\_\_\_\_ Grade: \_\_\_\_\_ Tier: \_\_\_\_\_

	counting all the objects (MCC.K.OA.2; MCC.1.OA.6)		<i>in the other hand. Say: "Here are 4 counters." Ask: "How many counters do you have altogether?"</i>		
		DP2	<i>Have the student hold out their hands. Place 5 counters in one hand. Say: "Here are 5 counters." Place 8 counters in the other hand. Say: "Here are 8 counters." Ask: "How many counters do you have altogether?"</i>		
		DP3	<i>Have the student hold out their hands. Place 9 counters in one hand. Say: "Here are 9 counters." Place 4 counters in the other hand. Say: "Here are 4 counters." Ask: "How many counters do you have altogether?"</i>		
		DP4	<i>Have the student hold out their hands. Place 8 counters in one hand. Say: "Here are 8 counters." Place 6 counters in the other hand. Say: "Here are 6 counters." Ask: "How many counters do you have altogether?"</i>		
2:11	Solving subtraction problems from 20 separating sets and counting all the objects (MCC.K.OA.2; MCC.1.OA.1)	BL	<i>Give the student a collection of 20 counters. Show student the problem card (Appendix E). Say: "Anthony had 14 counters and Sarah took 7 away. How many was Anthony left with? Use the counters to show your thinking."</i>		
		DP1	<i>Give the student a collection of 20 counters. Show student the problem card (Appendix E). Say: "Sarah had 18 oranges. She gave 9 to her grandmother. How many oranges does Sarah have left? Use the counters to show your thinking."</i>		
		DP2	<i>Give the student a collection of 20 counters. Show student the problem card (Appendix E). Say: "Adrian received 16 dollars for his birthday. He spent 5 dollars. How many dollars does he have now? Use the counters to show your thinking."</i>		
		DP3	<i>Give the student a collection of 20 counters. Show student the problem card (Appendix E). Say: "James has 15 baseball cards. He gave 6 cards to his brother. How many baseball cards does he have left? Use the counters to show your thinking."</i>		
		DP4	<i>Give the student a collection of 20 counters. Show student the problem card (Appendix E). Say: "The cook bought 17 eggs. She cooked 8 of the eggs. How many eggs does the cook have left? Use the counters to show your thinking."</i>		

**Individual Stage Data:**

Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
BL: ___/14	DP1: ___/14	DP2: ___/14	DP3: ___/14	DP4: ___/14	DP5: ___/14	DP6: ___/14	DP7: ___/14
Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
DP8: ___/14	DP9: ___/14	DP10: ___/14	DP11: ___/14	DP12: ___/14	DP : ___/14	DP : ___/14	DP : ___/14

BL = Baseline DP = Data Point

**Accumulated Stages Data: (stage 1 plus stage 2)**

Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
BL: ___/26	DP1: ___/26	DP2: ___/26	DP3: ___/26	DP4: ___/26	DP5: ___/26	DP6: ___/26	DP7: ___/26
Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
DP8: ___/26	DP9: ___/26	DP10: ___/26	DP11: ___/26	DP12: ___/26	DP : ___/26	DP : ___/26	DP : ___/26

BL = Baseline DP = Data Point

Student Name: \_\_\_\_\_ Teacher: \_\_\_\_\_ Grade: \_\_\_\_\_ Tier: \_\_\_\_\_

## NZ Numeracy Assessment - Stage Three

**Materials Needed for Assessment:** -Appendices F, G, H, I, J, & K- -48 counters- -2 index cards-

*Directions: Begin with Skill Number 3:1 and proceed through 3:12 using the materials listed above and the script in the chart below. Indicate in the columns to the right whether or not the student was able to demonstrate the skill. For students not able to demonstrate a specific skill, create an "Intervention Prescription" by selecting activities from the "NZ Numeracy Project Activities List." Give the assessment in its entirety (skill # 3.1 - 3.12) in order to obtain a baseline or data point score to progress monitor the student's progress.*

Skill #	Skill Description	Assessment Script		Demonstrated?	
				Yes	No
3:1	Rote counting 0-50 (MCC.K.CC.1)	BL	"Start counting from 0. Stop at 50."		
		DP1	"Start counting from 0. Stop at 50."		
		DP2	"Start counting from 0. Stop at 50."		
		DP3	"Start counting from 0. Stop at 50."		
		DP4	"Start counting from 0. Stop at 50."		
3:2	Saying the forwards and backwards number word sequence in the range 0-50, starting and ending with any number (MCC.K.CC.2)	BL	"Start counting from 22. Stop at 47."		
		DP1	"Start counting from 31. Stop at 49."		
		DP2	"Start counting from 19. Stop at 34."		
		DP3	"Start counting from 26. Stop at 38."		
		DP4	"Start counting from 13. Stop at 24."		
		BL	"Count backwards from 50. Stop at 0."		
		DP1	"Count backwards from 50. Stop at 0."		
		DP2	"Count backwards from 50. Stop at 0."		
		DP3	"Count backwards from 50. Stop at 0."		
		DP4	"Count backwards from 50. Stop at 0."		
		BL	"Count backwards from 38. Stop at 23."		
		DP1	"Count backwards from 34. Stop at 19."		
		DP2	"Count backwards from 48. Stop at 31."		
		DP3	"Count backwards from 26. Stop at 14."		
DP4	"Count backwards from 41. Stop at 29."				
3:3	Numeral recognition 0-50 (MCC.1.NBT.1)	BL	Show student the numeral cards 22, 39, and 46 (Appendix F) one at a time. Ask: "What number is this?"		
		DP1	Show student the numeral cards 31, 43, and 49 (Appendix F) one at a time. Ask: "What number is this?"		
		DP2	Show student the numeral cards 18, 24 and 41 (Appendix F) one at a time. Ask: "What number is this?"		
		DP3	Show student the numeral cards 14, 35, and 42 (Appendix F) one at a time. Ask: "What number is this?"		
		DP4	Show student the numeral cards 29, 32, and 44 (Appendix F) one at a time. Ask: "What number is this?"		
3:4	Number order: What comes before and after a given number in the range 0-50 (MCC.K.CC.2)	BL	Show student the numeral card 28 (Appendix F). Ask: "What number comes before?"; "What number comes after?"		
		DP1	Show student the numeral card 43 (Appendix F). Ask: "What number comes before?"; "What number comes after?"		
		DP2	Show student the numeral card 32 (Appendix F). Ask: "What number comes before?"; "What number comes after?"		
		DP3	Show student the numeral card 19 (Appendix F). Ask: "What number comes before?"; "What number comes after?"		
		DP4	Show student the numeral card 32 (Appendix F). Ask: "What number comes before?"; "What number comes after?"		

Student Name: \_\_\_\_\_ Teacher: \_\_\_\_\_ Grade: \_\_\_\_\_ Tier: \_\_\_\_\_

3:5	Ordering the numbers in the range 0-50 (MCC.K.CC.2)	BL	Place number cards (Appndix F) in front of the student out of order. Say: "Please put these cards in number order."		
		DP1	Place number cards (Appndix F) in front of the student out of order. Say: "Please put these cards in number order."		
		DP2	Place number cards (Appndix F) in front of the student out of order. Say: "Please put these cards in number order."		
		DP3	Place number cards (Appndix F) in front of the student out of order. Say: "Please put these cards in number order."		
		DP4	Place number cards (Appndix F) in front of the student out of order. Say: "Please put these cards in number order."		
3:6	Counting up to 50 objects by grouping the objects in tens (MCC.1.NBT.2)	BL	Place a collection of 40 counters in front of the student. Say: "Please count how many counters I have in this pile." Wait until the student finishes and gives you the total. If the student did not group the objects, Ask: "How could we group these objects to make it easier to count?"		
		DP1	Place a collection of 48 counters in front of the student. Say: "Please count how many counters I have in this pile." Wait until the student finishes and gives you the total. If the student did not group the objects, Ask: "How could we group these objects to make it easier to count?"		
		DP2	Place a collection of 36 counters in front of the student. Say: "Please count how many counters I have in this pile." Wait until the student finishes and gives you the total. If the student did not group the objects, Ask: "How could we group these objects to make it easier to count?"		
		DP3	Place a collection of 28 counters in front of the student. Say: "Please count how many counters I have in this pile." Wait until the student finishes and gives you the total. If the student did not group the objects, Ask: "How could we group these objects to make it easier to count?"		
		DP4	Place a collection of 45 counters in front of the student. Say: "Please count how many counters I have in this pile." Wait until the student finishes and gives you the total. If the student did not group the objects, Ask: "How could we group these objects to make it easier to count?"		
3:7	Comparing two numbers in the range 0-50 using number cards (MCC.1.NBT.3)	BL	Show the student two number cards, 28 and 37 (Appendix F). Ask: "Which number is more?"		
		DP1	Show the student two number cards, 39 and 26 (Appendix F). Ask: "Which number is more?"		
		DP2	Show the student two number cards, 43 and 39 (Appendix F). Ask: "Which number is more?"		
		DP3	Show the student two number cards, 24 and 42 (Appendix F). Ask: "Which number is more?"		
		DP4	Show the student two number cards, 32 and 47 (Appendix F). Ask: "Which number is more?"		
		BL	Show the student two number cards, 44 and 46 (Appendix F). Ask: "Which number is less?"		
		DP1	Show the student two number cards, 38 and 42 (Appendix F). Ask: "Which number is less?"		
		DP2	Show the student two number cards, 47 and 32 (Appendix F). Ask: "Which number is less?"		
		DP3	Show the student two number cards, 27 and 31 (Appendix F). Ask: "Which number is less?"		
DP4	Show the student two number cards, 49 and 41 (Appendix F). Ask: "Which number is less?"				
3:8	Instantly recognizing patterns to 10, including doubles (MCC.K.OA.1)	BL	Flash each ten frame (Appendix G) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?" Listen for the doubles strategy. Repeat this with all three cards.		
		DP1	Flash each ten frame (Appendix G) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?" Listen for the doubles strategy. Repeat this with all three cards.		
		DP2	Flash each ten frame (Appendix G) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?" Listen for the doubles strategy. Repeat this with all three cards.		
		DP3	Flash each ten frame (Appendix G) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How did you see it?" Listen for the doubles strategy. Repeat this with all three cards.		
		DP4	Flash each ten frame (Appendix G) to the student for 3 seconds, then cover. Ask: "How many do you see?"; "How		

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			did you see it?" Listen for the doubles strategy. Repeat this with all three cards.		
3:9	Recalling facts within 5, and doubles to 10 (MCCK.OA.1; MCCK.OA.5; MCC1.OA.6)	BL	Show the student the fact cards (Appendix H) one at a time. Say: "Tell me the answer to ... read the card aloud each time a new card is displayed." $2 + 2$ $3 + 1$ $0 + 5$ $4 + 4$ $1 + 4$ $5 + 5$ <i>Note: Observe the student to ensure that counting strategies are not being used.</i>		
		DP1	Show the student the fact cards (Appendix H) one at a time. Say: "Tell me the answer to ... read the card aloud each time a new card is displayed." $3 + 2$ $4 + 1$ $0 + 4$ $3 + 3$ $1 + 3$ $5 + 4$ <i>Note: Observe the student to ensure that counting strategies are not being used.</i>		
		DP2	Show the student the fact cards (Appendix H) one at a time. Say: "Tell me the answer to ... read the card aloud each time a new card is displayed." $1 + 1$ $5 + 1$ $0 + 3$ $2 + 5$ $3 + 4$ $5 + 2$ <i>Note: Observe the student to ensure that counting strategies are not being used.</i>		
		DP3	Show the student the fact cards (Appendix H) one at a time. Say: "Tell me the answer to ... read the card aloud each time a new card is displayed." $4 + 1$ $5 + 5$ $0 + 5$ $3 + 4$ $3 + 2$ $5 + 5$ <i>Note: Observe the student to ensure that counting strategies are not being used.</i>		
		DP4	Show the student the fact cards (Appendix H) one at a time. Say: "Tell me the answer to ... read the card aloud each time a new card is displayed." $2 + 2$ $1 + 4$ $2 + 5$ $4 + 4$ $4 + 1$ $1 + 3$ <i>Note: Observe the student to ensure that counting strategies are not being used.</i>		
3:10	Solving addition problems to 20 by counting all the objects in their head (MCC.1.OA.6)	BL	Show the student the addition problem card $8 + 5$ (Appendix I). Place 8 counters under one index card and 5 counters under another. Ask: "How many counters are there altogether?"; "How do you know?"		
		DP1	Show the student the addition problem card $9 + 2$ (Appendix I). Place 9 counters under one index card and 2 counters under another. Ask: "How many counters are there altogether?"; "How do you know?"		
		DP2	Show the student the addition problem card $3 + 5$ (Appendix I). Place 3 counters under one index card and 5 counters under another. Ask: "How many counters are there altogether?"; "How do you know?"		
		DP3	Show the student the addition problem card $4 + 7$ (Appendix I). Place 4 counters under one index card and 7 counters under another. Ask: "How many counters are there altogether?"; "How do you know?"		
		DP4	Show the student the addition problem card $2 + 6$ (Appendix I). Place 2 counters under one index card and 6 counters under another. Ask: "How many counters are there altogether?"; "How do you know?"		
3:11	Solving subtraction problems from 20 by counting all the objects in their head (MCC.1.OA.6)	BL	Show the student the problem card (Appendix J) and read it aloud. Say: "You have 19 lollipops, and you eat 7 of them. How many lollipops do you have left?" Ask: "How did you get your answer?"		
		DP1	Show the student the problem card (Appendix J) and read it aloud. Say: "You have 17 dollars, and you spend 6 dollars. How many dollars do you have left?" Ask: "How did you get your answer?"		
		DP2	Show the student the problem card (Appendix J) and read it aloud. Say: "You saw 18 kangaroos and then 5 of them hopped away. How many kangaroos were left?" Ask: "How did you get your answer?"		
		DP3	Show the student the problem card (Appendix J) and read it aloud. Say: "You have 16 ladybugs but 4 of them fly away. How many ladybugs are left?" Ask: "How did you get your answer?"		
		DP4	Show the student the problem card (Appendix J) and read it aloud. Say: "You have 14 cookies and you give 5 away to friends. How many cookies do you have left?" Ask: "How did you get your answer?"		

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3:12	Solving addition and subtraction problems with decade numbers by counting tens in their head (MCC.1.NBT.5; MCC.1.NBT.6)	BL	<i>Show the student the problem card (Appendix K) and read it aloud. Say: "There are 10 pieces of gum in a pack. If Dion has 3 packs and Ted has 2 packs, how many pieces of gum do they have altogether?" Ask: "How did you get your answer?"</i>		
		DP1	<i>Show the student the problem card (Appendix K) and read it aloud. Say: "There are 10 pieces of candy in a pack. If Lindsay has 5 packs and Sherri has 4 packs, how many pieces of candy do they have altogether?" Ask: "How did you get your answer?"</i>		
		DP2	<i>Show the student the problem card (Appendix K) and read it aloud. Say: "There are 10 strawberries per box. If Lisa has 6 boxes and Jolie has 2 boxes, how many strawberries do they have altogether?" Ask: "How did you get your answer?"</i>		
		DP3	<i>Show the student the problem card (Appendix K) and read it aloud. Say: "There are 10 bottles of water per case. If Kim has 5 cases and Debbie has 2 cases, how many bottles of water do they have altogether?" Ask: "How did you get your answer?"</i>		
		DP4	<i>Show the student the problem card (Appendix K) and read it aloud. Say: "There are 10 canaries per cage. If Janet has 3 cages and Teresa has 4 cases, how many canaries do they have altogether?" Ask: "How did you get your answer?"</i>		
		BL	<i>Show the student the problem card (Appendix K) and read it aloud. Say: "There are 10 pieces of gum in a pack. If Samantha had 5 packs of gum and gave 4 packs of gum to Jane, how many pieces of gum would Samantha have left?" Ask: "How did you get your answer?"</i>		
		DP1	<i>Show the student the problem card (Appendix K) and read it aloud. Say: "There are 10 pieces of candy in a pack. If Susan had 7 packs of candy and gave 3 packs of candy to Erin, how many pieces of candy would Susan have left?" Ask: "How did you get your answer?"</i>		
		DP2	<i>Show the student the problem card (Appendix K) and read it aloud. Say: "There are 10 apples per bag. If Cindy had 8 bags of apples and gave 1 bag of apples to Joyce, how many apples would Cindy have left?" Ask: "How did you get your answer?"</i>		
		DP3	<i>Show the student the problem card (Appendix K) and read it aloud. Say: "There are 10 pies per box. If George had 6 boxes of pies and gave 3 boxes of pies to Ed, how many pies would George have left?" Ask: "How did you get your answer?"</i>		
DP4	<i>Show the student the problem card (Appendix K) and read it aloud. Say: "There are 10 fish in each fish bowl. If Tonya had 3 fish bowls and sold 2 fish bowls to Jack, how many fish would Tonya have left?" Ask: "How did you get your answer?"</i>				

### Individual Stage Data:

Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
BL: ___/16	DP1: ___/16	DP2: ___/16	DP3: ___/16	DP4: ___/16	DP5: ___/16	DP6: ___/16	DP7: ___/16
Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
DP8: ___/16	DP9: ___/16	DP10: ___/16	DP11: ___/16	DP12: ___/16	DP : ___/16	DP : ___/16	DP : ___/16

BL = Baseline DP = Data Point

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**Accumulated Stages Data:** (stage 1 plus stage 2 plus stage 3)

Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
BL: ___/42	DP1: ___/42	DP2: ___/42	DP3: ___/42	DP4: ___/42	DP5: ___/42	DP6: ___/42	DP7: ___/42
Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
DP8: ___/42	DP9: ___/42	DP10: ___/42	DP11: ___/42	DP12: ___/42	DP : ___/42	DP : ___/42	DP : ___/42

*BL = Baseline DP = Data Point*

Student Name: \_\_\_\_\_ Teacher: \_\_\_\_\_ Grade: \_\_\_\_\_ Tier: \_\_\_\_\_

## NZ Numeracy Assessment - Stage Four

**Materials Needed for Assessment:** -Appendices L, M, N, O, P, Q, R, S- -14 counters- -1 index card-

**Directions:** Begin with Skill Number 4:1 and proceed through 4:17 using the materials listed above and the script in the chart below. Indicate in the columns to the right whether or not the student was able to demonstrate the skill. For students not able to demonstrate a specific skill, create an "Intervention Prescription" by selecting activities from the "NZ Numeracy Project Activities List." Give the assessment in its entirety (skill # 4:1 - 4:17) in order to obtain a baseline or data point score to progress monitor the student's progress.

Skill #	Skill Description	Assessment Script		Demonstrated?	
				Yes	No
4:1	Rote counting 0-100 <i>(MCC.K.CC.1)</i>	BL	"Start counting from 0. Stop at 100."		
		DP1	"Start counting from 0. Stop at 100."		
		DP2	"Start counting from 0. Stop at 100."		
		DP3	"Start counting from 0. Stop at 100."		
		DP4	"Start counting from 0. Stop at 100."		
4:2	Saying the forwards and backwards number word sequence in the range 0-100, starting and ending with any number <i>(MCC.K.CC.2)</i>	BL	"Start counting from 82. Stop at 97."		
		DP1	"Start counting from 74. Stop at 83."		
		DP2	"Start counting from 69. Stop at 81."		
		DP3	"Start counting from 84. Stop at 92."		
		DP4	"Start counting from 68. Stop at 77."		
		BL	"Count backwards from 70. Stop at 50."		
		DP1	"Count backwards from 80. Stop at 60."		
		DP2	"Count backwards from 90. Stop at 70."		
		DP3	"Count backwards from 60. Stop at 40."		
		DP4	"Count backwards from 50. Stop at 30."		
		BL	"Count backwards from 98. Stop at 86."		
		DP1	"Count backwards from 96. Stop at 82."		
		DP2	"Count backwards from 94. Stop at 83."		
DP3	"Count backwards from 95. Stop at 81."				
DP4	"Count backwards from 97. Stop at 85."				
4:3	Numeral recognition 0-100 <i>(MCC.1.NBT.1)</i>	BL	Show student the numeral cards 66, 73, and 95 (Appendix L) one at a time. Ask: "What number is this?"		
		DP1	Show student the numeral cards 45, 51, and 99 (Appendix L) one at a time. Ask: "What number is this?"		
		DP2	Show student the numeral cards 48, 53, and 85 (Appendix L) one at a time. Ask: "What number is this?"		
		DP3	Show student the numeral cards 58, 67, and 80 (Appendix L) one at a time. Ask: "What number is this?"		
		DP4	Show student the numeral cards 59, 70, and 94 (Appendix L) one at a time. Ask: "What number is this?"		
4:4	Number order: What comes before and after a given number in the range 0-100 <i>(MCC.K.CC.2)</i>	BL	Show student the numeral card 70 (Appendix L). Ask: "What number comes before?"; "What number comes after?"		
		DP1	Show student the numeral card 73 (Appendix L). Ask: "What number comes before?"; "What number comes after?"		
		DP2	Show student the numeral card 99 (Appendix L). Ask: "What number comes before?"; "What number comes after?"		
		DP3	Show student the numeral card 69 (Appendix L). Ask: "What number comes before?"; "What number comes after?"		
		DP4	Show student the numeral card 85 (Appendix L). Ask: "What number comes before?"; "What number comes after?"		

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4:5	Ordering the numbers in the range 0-100 (MCC.1.NBT.3)	BL	Say: "Order the numbers 100, 73, 95 from least to greatest." <i>Repeat numbers if necessary.</i>		
		DP1	Say: "Order the numbers 95, 63, 84 from least to greatest." <i>Repeat numbers if necessary.</i>		
		DP2	Say: "Order the numbers 58, 81, 39 from least to greatest." <i>Repeat numbers if necessary.</i>		
		DP3	Say: "Order the numbers 74, 68, 79 from least to greatest." <i>Repeat numbers if necessary.</i>		
		DP4	Say: "Order the numbers 99, 93, 97 from least to greatest." <i>Repeat numbers if necessary.</i>		
4:6	Comparing two numbers in the range 0-100 using number cards (MCC.1.NBT.3)	BL	Show the student two number cards, 58 and 69 (Appendix L). Ask: "Which number is more?"		
		DP1	Show the student two number cards, 63 and 51 (Appendix L). Ask: "Which number is more?"		
		DP2	Show the student two number cards, 70 and 67 (Appendix L). Ask: "Which number is more?"		
		DP3	Show the student two number cards, 85 and 73 (Appendix L). Ask: "Which number is more?"		
		DP4	Show the student two number cards, 91 and 59 (Appendix L). Ask: "Which number is more?"		
		BL	Show the student two number cards, 95 and 99 (Appendix L). Ask: "Which number is less?"		
		DP1	Show the student two number cards, 70 and 67 (Appendix L). Ask: "Which number is less?"		
		DP2	Show the student two number cards, 58 and 59 (Appendix L). Ask: "Which number is less?"		
		DP3	Show the student two number cards, 80 and 91 (Appendix L). Ask: "Which number is less?"		
DP4	Show the student two number cards, 63 and 69 (Appendix L). Ask: "Which number is less?"				
4:7	Saying the forwards and backwards number word sequences in the range 0-100 for twos, fives, and tens (MCC.2.NBT.2)	BL	Say: "Start counting by twos from 22. Stop at 48."		
		DP1	Say: "Start counting by twos from 26. Stop at 52."		
		DP2	Say: "Start counting by twos from 24. Stop at 36."		
		DP3	Say: "Start counting by twos from 34. Stop at 52."		
		DP4	Say: "Start counting by twos from 46. Stop at 64."		
		BL	Say: "Count backwards by fives from 50. Stop at 0."		
		DP1	Say: "Count backwards by fives from 45. Stop at 0."		
		DP2	Say: "Count backwards by fives from 40. Stop at 0."		
		DP3	Say: "Count backwards by fives from 55. Stop at 0."		
		DP4	Say: "Count backwards by fives from 60. Stop at 0."		
		BL	Say: "Count backwards by tens from 100. Stop at 20."		
		DP1	Say: "Count backwards by tens from 90. Stop at 30."		
		DP2	Say: "Count backwards by tens from 80. Stop at 40."		
DP3	Say: "Count backwards by tens from 100. Stop at 60."				
DP4	Say: "Count backwards by tens from 90. Stop at 50."				
4:8	Recalling the facts up to 10, and the teen facts (MCC.1.OA.6)	BL	Show the student the fact cards (Appendix M) one at a time. Say: "Tell me the answer to ... read the card aloud each time a new card is displayed." <i>Note: Observe the student to ensure that counting strategies are not being used.</i> 5 + 4      7 + 1      0 + 6      3 + 10      10 + 8      2 + 2		
		DP1	Show the student the fact cards (Appendix M) one at a time. Say: "Tell me the answer to ... read the card aloud each time a new card is displayed." <i>Note: Observe the student to ensure that counting strategies are not being used.</i> 6 + 2      8 + 1      0 + 5      4 + 10      10 + 7      3 + 3		

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		DP2	<p>Show the student the fact cards (Appendix M) one at a time. Say: "Tell me the answer to ... read the card aloud each time a new card is displayed." Note: Observe the student to ensure that counting strategies are not being used.</p> <p style="text-align: center;"> <math>7 + 3</math>      <math>6 + 1</math>      <math>0 + 2</math>      <math>5 + 10</math>      <math>10 + 4</math>      <math>4 + 4</math> </p>		
		DP3	<p>Show the student the fact cards (Appendix M) one at a time. Say: "Tell me the answer to ... read the card aloud each time a new card is displayed." Note: Observe the student to ensure that counting strategies are not being used.</p> <p style="text-align: center;"> <math>5 + 3</math>      <math>4 + 1</math>      <math>0 + 3</math>      <math>6 + 10</math>      <math>10 + 6</math>      <math>5 + 5</math> </p>		
		DP4	<p>Show the student the fact cards (Appendix M) one at a time. Say: "Tell me the answer to ... read the card aloud each time a new card is displayed." Note: Observe the student to ensure that counting strategies are not being used.</p> <p style="text-align: center;"> <math>4 + 5</math>      <math>5 + 1</math>      <math>0 + 4</math>      <math>7 + 10</math>      <math>10 + 5</math>      <math>1 + 1</math> </p>		
4:9	Recalling the number of 10s within decades that add to 100 (MCC.1.NBT.4)	BL	Say: "I have 70 pennies. How many more do I need to have 100 pennies?" Ask: "How did you get your answer?" Repeat the question if necessary.		
		DP1	Say: "I have 20 buttons. How many more do I need to have 100 buttons?" Ask: "How did you get your answer?" Repeat the question if necessary.		
		DP2	Say: "I have 30 books. How many more do I need to have 100 books?" Ask: "How did you get your answer?" Repeat the question if necessary.		
		DP3	Say: "I have 50 pictures. How many more do I need to have 100 pictures?" Ask: "How did you get your answer?" Repeat the question if necessary.		
		DP4	Say: "I have 40 pencils. How many more do I need to have 100 pencils?" Ask: "How did you get your answer?" Repeat the question if necessary.		
4:10	Solving addition problems to 100 by counting on in their head (MCC.2.NBT.5)	BL	Show the student the addition problem card (Appendix N). Say: "Donald has 14 oranges. He buys 8 more. How many oranges does he have now?" Ask: "How did you get your answer?"		
		DP1	Show the student the addition problem card (Appendix N). Say: "Aiesha found 32 beads. Dante found 11 more. How many beads do they have altogether?" Ask: "How did you get your answer?"		
		DP2	Show the student the addition problem card (Appendix N). Say: "Regina has 17 stickers. She buys 9 more. How many stickers does she have now?" Ask: "How did you get your answer?"		
		DP3	Show the student the addition problem card (Appendix N). Say: "Jessica found 43 seashells. Melissa found 12 more. How many seashells do they have altogether?" Ask: "How did you get your answer?"		
		DP4	Show the student the addition problem card (Appendix N). Say: "Stan has 15 baseball cards. He buys 8 more. How many baseball cards does he have now?" Ask: "How did you get your answer?"		
4:11	Solving subtraction problems to 100 by counting back in their head (MCC.2.NBT.5)	BL	Show the student the subtraction problem card (Appendix O). Say: "There are 53 people on the bus. 16 people get off. How many people are left on the bus?" Ask: "How did you get your answer?"		
		DP1	Show the student the subtraction problem card (Appendix O). Say: "There are 47 pets in the pet store. 14 pets are sold to customers. How many pets are left in the pet store?" Ask: "How did you get your answer?"		
		DP2	Show the student the subtraction problem card (Appendix O). Say: "Hugo saw 38 ducks in the pond. He saw 17 fly away. How many ducks are left in the pond?" Ask: "How did you get your answer?"		
		DP3	Show the student the subtraction problem card (Appendix O). Say: "Alex received \$62 for his birthday. He spent \$13 on a toy. How much money does Alex have left?" Ask: "How did you get your answer?"		
		DP4	Show the student the subtraction problem card (Appendix O). Say: "Fred had 58 toy cars. He gave his best friend 12 of his cars. How many toy cars does Fred have left?" Ask: "How did you get your answer?"		
4:12	Solving addition and subtraction problems	BL	Show the student the problem card (Appendix P). Say: "Ali collected 13 marbles. Her grandma gave her 50 more for her birthday. How many marbles does Ali have now?" Ask: "How did you get your answer?"		

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	using groups of tens (MCC.1.NBT.4, MCC.1.NBT.6, MCC.2.NBT.8)	DP1	Show the student the problem card (Appendix P). Say: "Sam received 17 dollars. His aunt gave him 60 more dollars for Christmas. How many dollars does Sam have now?" Ask: "How did you get your answer?"		
		DP2	Show the student the problem card (Appendix P). Say: "Tracy invited 19 friends to her wedding. Tracy's mother invited 40 more people to the wedding. How many people were invited to the wedding in all?" Ask: "How did you get your answer?"		
		DP3	Show the student the problem card (Appendix P). Say: "The mother bird collected 18 worms. The father bird collected 30 worms. How many worms did they collect in all?" Ask: "How did you get your answer?"		
		DP4	Show the student the problem card (Appendix P). Say: "Ethan read 16 pages on Monday and 50 pages on Tuesday. How many pages did he read in all on those two days?" Ask: "How did you get your answer?"		
		BL	Show the student the problem card (Appendix P). Say: "Jim planted 46 flowers. Only 10 of them bloomed. How many flowers did not bloom?" Ask: "How did you get your answer?"		
		DP1	Show the student the problem card (Appendix P). Say: "Julie counted 32 birds in the tree. Suddenly some of them flew away and only 10 were left. How many birds flew away?" Ask: "How did you get your answer?"		
		DP2	Show the student the problem card (Appendix P). Say: "Jackie had 83 dollars in her jacket pocket in the morning. At the end of the day she counted her money and had 30 dollars. How much money did she spend that day?" Ask: "How did you get your answer?"		
		DP3	Show the student the problem card (Appendix P). Say: "Mrs. Jones baked 36 cookies for her sewing club meeting. After the meeting there were 20 cookies left. How many cookies were not eaten?" Ask: "How did you get your answer?"		
			DP4	Show the student the problem card (Appendix P). Say: "Donald had 44 trees in his back yard before a big storm hit. After the storm, there were 30 trees still standing. How many trees were knocked down?" Ask: "How did you get your answer?"	
4:13	Solving multiplication problems using skip counting by twos, fives, and tens. (MCC.3.OA.1, MCC.3.OA.3)	BL	Show the student the problem card (Appendix Q). Say: In each bowl there are five apples. Edward has three bowls. How many apples does he have? Ask: How did you get your answer?" Note: Take note of the strategy that the student used. If the student counted by ones or needed to use materials to solve the problem, no credit is given. If the student uses skip counting, additive strategies, or knowledge of the multiplication fact, credit is given.		
		DP1	Show the student the problem card (Appendix Q). Say: On each page there are 6 stickers. Sally has four pages. How many stickers does she have? Ask: "How did you get your answer?" Note: Take note of the strategy that the student used. If the student counted by ones or needed to use materials to solve the problem, no credit is given. If the student uses skip counting, additive strategies, or knowledge of the multiplication fact, credit is given.		
		DP2	Show the student the problem card (Appendix Q). Say: Each momma cat has four kittens. There are three momma cats. How many kittens are there? Ask: "How did you get your answer?" Note: Take note of the strategy that the student used. If the student counted by ones or needed to use materials to solve the problem, no credit is given. If the student uses skip counting, additive strategies, or knowledge of the multiplication fact, credit is given.		
		DP3	Show the student the problem card (Appendix Q). Say: On each plate there are three slices of pizza. There are seven plates. How many slices of pizza are there? Ask: "How did you get your answer?" Note: Take note of the strategy that the student used. If the student counted by ones or needed to use materials to solve the problem, no credit is given. If the student uses skip counting, additive strategies, or knowledge of the multiplication fact, credit is given.		

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		DP4	<p>Show the student the problem card (Appendix Q). Say: Mr. Smith ran five miles each day. He ran for eight days. How many miles did he run in all? Ask: "How did you get your answer?"</p> <p>Note: Take note of the strategy that the student used. If the student counted by ones or needed to use materials to solve the problem, no credit is given. If the student uses skip counting, additive strategies, or knowledge of the multiplication fact, credit is given.</p>		
4:14	Solving division problems by equal sharing in ones, twos, and fives. (MCC.3.OA.2, MCC.3.OA.3)	BL	<p>Show the student the problem card (Appendix R) and provide them with a collection of counters. Say: There are twenty lollipops. If two people are sharing them, how many lollipops would each person get? Ask: How did you get your answer? Note: The student is able to use the counters to solve this problem and still receive credit. Take notice of how they shared the counters, whether by ones, twos, fives, etc.</p>		
		DP1	<p>Show the student the problem card (Appendix R) and provide them with a collection of counters. Say: There are 21 flowers. If three people share them, how many flowers would each person get? Ask: How did you get your answer? Note: The student is able to use the counters to solve this problem and still receive credit. Take notice of how they shared the counters, whether by ones, twos, fives, etc.</p>		
		DP2	<p>Show the student the problem card (Appendix R) and provide them with a collection of counters. Say: There are 45 pieces of candy. If 9 people are sharing them, how many pieces of candy will each person get? Ask: How did you get your answer? Note: The student is able to use the counters to solve this problem and still receive credit. Take notice of how they shared the counters, whether by ones, twos, fives, etc.</p>		
		DP3	<p>Show the student the problem card (Appendix R) and provide them with a collection of counters. Say: There are 32 chairs. If eight tables share them, how many chairs will each table get? Ask: How did you get your answer? Note: The student is able to use the counters to solve this problem and still receive credit. Take notice of how they shared the counters, whether by ones, twos, fives, etc.</p>		
		DP4	<p>Show the student the problem card (Appendix R) and provide them with a collection of counters. Say: There are 18 pencils. If six students share them, how many pencils will each student get? Ask: How did you get your answer? Note: The student is able to use the counters to solve this problem and still receive credit. Take notice of how they shared the counters, whether by ones, twos, fives, etc.</p>		
4:15	Finding halves and quarters of sets, regions, and objects by sharing. (MCC.3.OA.2, MCC.3.OA.3)	BL	<p>Give the student eight counters. Say: I want you to split these counters in half. Give half to you and half to me. Ask: How do you know that you have split them in half?</p>		
		DP1	<p>Give the student ten counters. Say: I want you to split these counters in half. Give half to you and half to me. Ask: How do you know that you have split them in half?</p>		
		DP2	<p>Give the student six counters. Say: I want you to split these counters in half. Give half to you and half to me. Ask: How do you know that you have split them in half?</p>		
		DP3	<p>Give the student twelve counters. Say: I want you to split these counters in half. Give half to you and half to me. Ask: How do you know that you have split them in half?</p>		
		DP4	<p>Give the student fourteen counters. Say: I want you to split these counters in half. Give half to you and half to me. Ask: How do you know that you have split them in half?</p>		
		BL	<p>Give the student a 3x5 index card (or piece of paper). Say: You will be sharing this "cake" with three other friends. Ask: If the cake had to be split into fourths, how could you show that? Allow the student to fold, draw, or cut the index card to divide it into fourths.</p>		
		DP1	<p>Give the student a 3x5 index card (or piece of paper). Say: You will be sharing this "casserole" with three other friends. Ask: If the casserole had to be split into fourths, how could you show that? Allow the student to fold, draw, or cut the index card to divide it into fourths.</p>		
DP2	<p>Give the student a 3x5 index card (or piece of paper). Say: You will be sharing this "brownie" with three other friends. Ask: If the cake had to be split into fourths, how could you show that? Allow the student to fold, draw, or cut</p>				

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			<i>the index card to divide it into fourths.</i>		
		DP3	<i>Give the student a 3x5 index card (or piece of paper). Say: You will be sharing this "lasagna" with three other friends. Ask: If the lasagna had to be split into fourths, how could you show that? Allow the student to fold, draw, or cut the index card to divide it into fourths.</i>		
		DP4	<i>Give the student a 3x5 index card (or piece of paper). Say: You will be sharing this "cookie" with three other friends. Ask: If the cookie had to be split into fourths, how could you show that? Allow the student to fold, draw, or cut the index card to divide it into fourths.</i>		
4:16	Finding simple fractions of regions. (MCC.1.G.3, MCC.2.G.3, MCC.3.G.3)	BL	<i>Show the student the problem card (Appendix S). Say: If this is one half of the shape, then what is the shape? Ask: How do you know? Note: Allow the student to trace with their finger if s/he names the shape incorrectly. We do not want to penalize a student for not using proper terminology because that is not what is being assessed.</i>		
		DP1	<i>Show the student the problem card (Appendix S). Say: If this is one half of the shape, then what is the shape? Ask: How do you know? Note: Allow the student to trace with their finger if s/he names the shape incorrectly. We do not want to penalize a student for not using proper terminology because that is not what is being assessed.</i>		
		DP2	<i>Show the student the problem card (Appendix S). Say: If this is one half of the shape, then what is the shape? Ask: How do you know? Note: Allow the student to trace with their finger if s/he names the shape incorrectly. We do not want to penalize a student for not using proper terminology because that is not what is being assessed.</i>		
		DP3	<i>Show the student the problem card (Appendix S). Say: If this is one half of the shape, then what is the shape? Ask: How do you know? Note: Allow the student to trace with their finger if s/he names the shape incorrectly. We do not want to penalize a student for not using proper terminology because that is not what is being assessed.</i>		
		DP4	<i>Show the student the problem card (Appendix S). Say: If this is one half of the shape, then what is the shape? Ask: How do you know? Note: Allow the student to trace with their finger if s/he names the shape incorrectly. We do not want to penalize a student for not using proper terminology because that is not what is being assessed.</i>		
4:17	Finding fractions of sets by sharing. (MCC.3.NF.1)	BL	<i>Show the student a collection of four counters. Say: This is one-third of a set. How many counters are in the whole set? Ask: How did you get your answer? Note: Allow the student to use the remaining counters to solve the problem if needed. If the student uses the counters to share, credit is still given for the correct solution.</i>		
		DP1	<i>Show the student a collection of ten counters. Say: This is one-half of a set. How many counters are in the whole set? Ask: How did you get your answer? Note: Allow the student to use the remaining counters to solve the problem if needed. If the student uses the counters to share, credit is still given for the correct solution.</i>		
		DP2	<i>Show the student a collection of three counters. Say: This is one-fourth of a set. How many counters are in the whole set? Ask: How did you get your answer? Note: Allow the student to use the remaining counters to solve the problem if needed. If the student uses the counters to share, credit is still given for the correct solution.</i>		
		DP3	<i>Show the student a collection of two counters. Say: This is one-third of a set. How many counters are in the whole set? Ask: How did you get your answer? Note: Allow the student to use the remaining counters to solve the problem if needed. If the student uses the counters to share, credit is still given for the correct solution.</i>		
		DP4	<i>Show the student a collection of five counters. Say: This is one-fifth of a set. How many counters are in the whole set? Ask: How did you get your answer? Note: Allow the student to use the remaining counters to solve the problem if needed. If the student uses the counters to share, credit is still given for the correct solution.</i>		

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**Individual Stage Data:**

Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
BL: ___/24	DP1: ___/24	DP2: ___/24	DP3: ___/24	DP4: ___/24	DP5: ___/24	DP6: ___/24	DP7: ___/24
Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
DP8: ___/24	DP9: ___/24	DP10: ___/24	DP11: ___/24	DP12: ___/24	DP : ___/24	DP : ___/24	DP : ___/24

*BL = Baseline DP = Data Point*

**Accumulated Stages Data:** *(stage 1 plus stage 2 plus stage 3 plus stage 4)*

Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
BL: ___/66	DP1: ___/66	DP2: ___/66	DP3: ___/66	DP4: ___/66	DP5: ___/66	DP6: ___/66	DP7: ___/66
Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
DP8: ___/66	DP9: ___/66	DP10: ___/66	DP11: ___/66	DP12: ___/66	DP : ___/66	DP : ___/66	DP : ___/66

*BL = Baseline DP = Data Point*

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## NZ Numeracy Assessment - Stage Five

**Materials Needed for Assessment:** Appendix T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE; 24 counters; index card

**Directions:** Begin with Skill Number 5:1 and proceed through 5:20 using the materials listed above and the script in the chart below. Indicate in the columns to the right whether or not the student was able to demonstrate the skill. For students not able to demonstrate a specific skill, create an "Intervention Prescription" by selecting activities from the "NZ Numeracy Project Activities List." Give the assessment in its entirety (skill #) in order to obtain a baseline or data point score to progress monitor the student's progress.

Skill #	Skill Description	Assessment Script		Demonstrated?	
				Yes	No
5:1	Identify numbers in the range 0-1,000. (MCC.2.NBT.3)	BL	Show student the numeral cards 705, 432, 999 (Appendix T) one at a time. Ask: "What number is this?"		
		DP1	Show student the numeral cards 321, 657, 990 (Appendix T) one at a time. Ask: "What number is this?"		
		DP2	Show student the numeral cards 210, 513, 893 (Appendix T) one at a time. Ask: "What number is this?"		
		DP3	Show student the numeral cards 101, 411, 997 (Appendix T) one at a time. Ask: "What number is this?"		
		DP4	Show student the numeral cards 650, 209, 1,000 (Appendix T) one at a time. Ask: "What number is this?"		
5:2	Say the forwards and backwards number word sequences by ones, ten, hundreds, and thousands in the range of 0-1,000,000, including finding numbers that are 10, 100, and 1,000 more or less than a given number. (MCC.4.NBT2)	BL	"Start counting from 324. Stop at 341."		
		DP1	"Start counting by hundreds from 500,000. Stop at 501,000."		
		DP2	"Start counting by tens from 10,260. Stop at 10,340."		
		DP3	"Start counting by thousands from 1,084. Stop at 5,084."		
		DP4	"Start counting by tens from 968. Stop at 1,068."		
		BL	"Count backwards from 870. Stop at 850."		
		DP1	"Count backwards by hundreds from 780. Stop at 180."		
		DP2	"Count backwards by tens from 10,590. Stop at 10,470."		
		DP3	"Count backwards by thousands from 430,000. Stop at 420,000."		
		DP4	"Count backwards tens from 1,950. Stop at 1,830."		
		BL	"What number is 1,000 less than 543,000?"		
		DP1	"What number is 100 more than 801,000?"		
		DP2	"What number is 10 less than 697?"		
		DP3	"What number is 1,000 more than 42,000?"		
DP4	"What number is 100 less than 1,000,000?"				
5:3	Order the numbers in the range 0-1,000. (MCC.2.NBT.4)	BL	Say: "Order the numbers 909; 995; 999 from least to greatest." Repeat numbers if necessary.		
		DP1	Say: "Order the numbers 443; 708; 441 from least to greatest." Repeat numbers if necessary.		
		DP2	Say: "Order the numbers 180; 108; 188 from least to greatest." Repeat numbers if necessary.		
		DP3	Say: "Order the numbers 600; 133; 295 from least to greatest." Repeat numbers if necessary.		
		DP4	Say: "Order the numbers 319; 267; 114 from least to greatest." Repeat numbers if necessary.		
5:4	Recall the number of tens and hundreds in 100s and 1,000s. (MCC.2.NBT.1)	BL	"How many hundreds are in all of the number 8,320?"		
		DP1	"How many tens are in all of the number 465?"		
		DP2	"How many tens are in all of the number 1,693?"		
		DP3	"How many hundreds are in all of the number 7,777?"		
		DP4	"How many tens are in all of the number 3,578?"		

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5:5	Round three digit whole numbers to the nearest 10 or 100. (MCC.3.NBT.1)	BL	Say: "Round 234 to the nearest hundred."		
		DP1	Say: "Round 578 to the nearest ten."		
		DP2	Say: "Round 180 to the nearest hundred."		
		DP3	Say: "Round 999 to the nearest ten."		
		DP4	Say: "Round 910 to the nearest hundred."		
5:6	Recall the multiples of 100 that add up to 1,000. (MCC.3.NBT.2)	BL	Say: "I have 700 pennies. How many more do I need to have 1,000 pennies?" Ask: "How did you get your answer?" <i>Repeat the question if necessary.</i>		
		DP1	Say: "I have 200 buttons. How many more do I need to have 1,000 buttons?" Ask: "How did you get your answer?" <i>Repeat the question if necessary.</i>		
		DP2	Say: "I have 300 books. How many more do I need to have 1,000 books?" Ask: "How did you get your answer?" <i>Repeat the question if necessary.</i>		
		DP3	Say: "I have 500 pictures. How many more do I need to have 1,000 pictures?" Ask: "How did you get your answer?" <i>Repeat the question if necessary.</i>		
		DP4	Say: "I have 400 pencils. How many more do I need to have 1,000 pencils?" Ask: "How did you get your answer?" <i>Repeat the question if necessary.</i>		
5:7	Identify the symbols for halves, quarters, thirds, fifths, and tenths including fractions greater than 1. (MCC.3.NF.1)	BL	Show the student the fraction card (Appendix U) one at a time. Say: "What is the name for this fraction?" (1/2) <i>Note: The correct name for this fraction is "one-half".</i>		
		DP1	Show the student the fraction card (Appendix U) one at a time. Say: "What is the name for this fraction?" (3/4) <i>Note: If the student says "three-fourths", ask the student for another name. The correct name for this fraction is "three-quarters".</i>		
		DP2	Show the student the fraction card (Appendix U) one at a time. Say: "What is the name for this fraction?" (2/3) <i>Note: The correct name for this fraction is "two-thirds".</i>		
		DP3	Show the student the fraction card (Appendix U) one at a time. Say: "What is the name for this fraction?" (3/5) <i>Note: The correct name for this fraction is "three-fifths".</i>		
		DP4	Show the student the fraction card (Appendix U) one at a time. Say: "What is the name for this fraction?" (6/10) <i>Note: The correct name for this fraction is "six-tenths".</i>		
		BL	Show the student the fraction card (Appendix U) one at a time. Say: "What is the name for this fraction?" (5/4) <i>Note: If the student says "five-fourths", ask the student for another name. The correct name for this fraction is "five-quarters".</i>		
		DP1	Show the student the fraction card (Appendix U) one at a time. Say: "What is the name for this fraction?" (3/2) <i>Note: The correct name for this fraction is "three halves".</i>		
		DP2	Show the student the fraction card (Appendix U) one at a time. Say: "What is the name for this fraction?" (10/5) <i>Note: The correct name for this fraction is "ten-fifths".</i>		
		DP3	Show the student the fraction card (Appendix U) one at a time. Say: "What is the name for this fraction?" (11/10) <i>Note: The correct name for this fraction is "eleven-tenths".</i>		
		DP4	Show the student the fraction card (Appendix U) one at a time. Say: "What is the name for this fraction?" (5/3) <i>Note: The correct name for this fraction is "five-thirds".</i>		
5:8	Order fractions with the same denominator.	BL	Say: Put the following fractions in order from least to greatest: 2/4; 3/4; 1/4		
		DP1	Say: Put the following fractions in order from least to greatest: 3/6; 1/6; 4/6		
		DP2	Say: Put the following fractions in order from least to greatest: 5/10; 2/10; 8/10		

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	(MCC.3.NF.3)	DP3	Say: Put the following fractions in order from least to greatest: $\frac{4}{12}$ ; $\frac{2}{12}$ ; $\frac{9}{12}$		
		DP4	Say: Put the following fractions in order from least to greatest: $\frac{4}{16}$ ; $\frac{11}{16}$ ; $\frac{7}{16}$		
5:9	Know the number 1, 10, and 100 before and after a given number in the range 0-1,000. (MCC.2.NBT.8)	BL	Say: "Name the number that is 1, 10, and 100 before the number 500."		
		DP1	Say: "Name the number that is 1, 10, and 100 before the number 387."		
		DP2	Say: "Name the number that is 1, 10, and 100 before the number 652."		
		DP3	Say: "Name the number that is 1, 10, and 100 before the number 298."		
		DP4	Say: "Name the number that is 1, 10, and 100 before the number 484."		
		BL	Say: "Name the number that is 1, 10, and 100 after 500."		
		DP1	Say: "Name the number that is 1, 10, and 100 after 387."		
		DP2	Say: "Name the number that is 1, 10, and 100 after 652."		
		DP3	Say: "Name the number that is 1, 10, and 100 after 298."		
		DP4	Say: "Name the number that is 1, 10, and 100 after 484."		
5:10	Recall addition and subtraction facts within 20. (MCC.2.OA.2)	BL	Place 8 counters under a card then place 6 under another card. Say: "Here are 8 counters and here are 6 counters. How many counters are there altogether?" <i>Note: Take note of the strategy that the student used. If the student counted on or needed to use materials to solve the problem, no credit is given. If the student uses a part-whole method then credit is given. For example, "I knew that <math>8 + 2 = 10</math> and 4 more is 14."</i>		
		DP1	Place 9 counters under a card then place 5 under another card. Say: "Here are 9 counters and here are 5 counters. How many counters are there altogether?" <i>Note: Take note of the strategy that the student used. If the student counted on or needed to use materials to solve the problem, no credit is given. If the student uses a part-whole method then credit is given. For example, "I knew that <math>5 + 5 = 10</math> and 4 more is 14."</i>		
		DP2	Place 7 counters under a card then place 5 under another card. Say: "Here are 7 counters and here are 5 counters. How many counters are there altogether?" <i>Note: Take note of the strategy that the student used. If the student counted on or needed to use materials to solve the problem, no credit is given. If the student uses a part-whole method then credit is given. For example, "I knew that <math>7 + 7 = 14</math> and if I take 2 away, my answer is 12."</i>		
		DP3	Place 6 counters under a card then place 5 under another card. Say: "Here are 6 counters and here are 5 counters. How many counters are there altogether?" <i>Note: Take note of the strategy that the student used. If the student counted on or needed to use materials to solve the problem, no credit is given. If the student uses a part-whole method then credit is given. For example, "I knew that <math>6 + 6 = 12</math> and if I take 1 away, my answer is 11."</i>		
		DP4	Place 9 counters under a card then place 7 under another card. Say: "Here are 9 counters and here are 7 counters. How many counters are there altogether?" <i>Note: Take note of the strategy that the student used. If the student counted on or needed to use materials to solve the problem, no credit is given. If the student uses a part-whole method then credit is given. For example, "I knew that <math>7 + 3 = 10</math> and 6 more is 16."</i>		
		BL	Place 14 counters under a card. Say: "Here are 14 counters. If I take away 8. How many counters are left?" <i>Note: Take note of the strategy that the student used. If the student counted back by ones or needed to use materials to solve the problem, no credit is given. If the student uses a part-whole method then credit is given.</i>		

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			<i>For example, "14 - 4 = 10 and if you take away 4 more, the answer is 6."</i>		
		DP1	Place 16 counters under a card. Say: "Here are 16 counters. If I take 7 away. How many counters are left?" <i>Note: Take note of the strategy that the student used. If the student counted back by ones or needed to use materials to solve the problem, no credit is given. If the student uses a part-whole method then credit is given. For example, "16 - 6 = 10 and if you take away 1 more, the answer is 9."</i>		
		DP2	Place 12 counters under a card. Say: "Here are 12 counters. If I take 9 away. How many counters are left?" <i>Note: Take note of the strategy that the student used. If the student counted back by ones or needed to use materials to solve the problem, no credit is given. If the student uses a part-whole method then credit is given. For example, "12 - 10 = 2 and I have to add one to make 3."</i>		
		DP3	Place 18 counters under a card. Say: "Here are 18 counters. If I take 6 away. How many counters are left?" <i>Note: Take note of the strategy that the student used. If the student counted back by ones or needed to use materials to solve the problem, no credit is given. If the student uses a part-whole method then credit is given. For example, "I know that 6 + 2 = 8 and 8 + 10 = 18, so 10 + 2 = 12."</i>		
		DP4	Place 15 counters under a card. Say: "Here are 15 counters. Take 9 away. How many counters are left?" <i>Note: Take note of the strategy that the student used. If the student counted back by ones or needed to use materials to solve the problem, no credit is given. If the student uses a part-whole method then credit is given. For example, "9 + 1 = 10 and 10 + 5 = 15, so 5 + 1 = 6."</i>		
5:11	Recall groupings within 100. (MCC.2.NBT.5)	BL	Ask: "What number can you add to 47 to make 100?"		
		DP1	Ask: "What number can you add to 74 to make 100?"		
		DP2	Ask: "What number can you add to 61 to make 100?"		
		DP3	Ask: "What number can you add to 32 to make 100?"		
		DP4	Ask: "What number can you add to 83 to make 100?"		
5:12	Solve addition and subtraction problems by using doubles. (MCC.1.OA.6)	BL	Say: "Use your understanding of doubles to solve this problem." <i>Show the student the problem card (Appendix V).</i> Ask: "How many dots do you see? How did you figure out your answer?" <i>Take note of the strategy that the student used and give credit for answers in which doubles were used. If the student counted by ones or counted on to solve the problem, no credit is given. For example, "I know that 4 + 4 = 8 and 1 more is 9."</i>		
		DP1	Say: "Use your understanding of doubles to solve this problem." <i>Show the student the problem card (Appendix V).</i> Ask: "How many dots do you see? How did you figure out your answer?" <i>Take note of the strategy that the student used and give credit for answers in which doubles were used. If the student counted by ones or counted on to solve the problem, no credit is given. For example, "I know that 9 + 9 = 18 and 1 more is 19."</i>		
		DP2	Say: "Use your understanding of doubles to solve this problem." <i>Show the student the problem card (Appendix V).</i> Ask: "How many dots do you see? How did you figure out your answer?" <i>Take note of the strategy that the student used and give credit for answers in which doubles were used. If the student counted by ones or counted on to solve the problem, no credit is given. For example, "I know that 6 + 6 = 12 and 1 more is 13."</i>		
		DP3	Say: "Use your understanding of doubles to solve this problem." <i>Show the student the problem card (Appendix V).</i> Ask: "How many dots do you see? How did you figure out your answer?" <i>Take note of the strategy that the student used and give credit for answers in which doubles were used. If the student counted by ones or counted on to solve the problem, no credit is given. For example, "I know that 7 + 7 = 14 and 1 more is 15."</i>		
		DP4	Say: "Use your understanding of doubles strategy to solve this problem." <i>Show the student the problem card (Appendix V).</i> Ask: "How many dots do you see? How did you figure out your answer?" <i>Take note of the strategy that the student used and give credit for answers in which doubles were used. If the student counted by ones or counted on to solve</i>		

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			<i>the problem, no credit is given. For example, "I know that <math>3 + 3 = 6</math> and 1 more is 7."</i>		
		BL	Say: "Use your understanding of doubles to solve this problem." <i>Show the student the problem card (Appendix W).</i> Ask: "How can you get the answer to $13 - 6 = ?$ " <i>Take note of the strategy that the student used and give credit for answers in which doubles were used. If the student counted back or counted on to solve the problem, no credit is given. For example, "I know that <math>6 + 6 = 12</math> and 1 more is 13."</i>		
		DP1	Say: "Use your understanding of doubles to solve this problem." <i>Show the student the problem card (Appendix W).</i> Ask: "How can you get the answer to $11 - 5 = ?$ " <i>Take note of the strategy that the student used and give credit for answers in which doubles were used. If the student counted back or counted on to solve the problem, no credit is given. For example, "I know that <math>5 = 5 = 10</math> and 1 more is 11."</i>		
		DP2	Say: "Use your understanding of doubles to solve this problem." <i>Show the student the problem card (Appendix W).</i> Ask: "How can you get the answer to $15 - 7 = ?$ " <i>Take note of the strategy that the student used and give credit for answers in which doubles were used. If the student counted back or counted on to solve the problem, no credit is given. For example, "I know that <math>7 + 7 = 14</math> and 1 more is 15."</i>		
		DP3	Say: "Use your understanding of doubles to solve this problem." <i>Show the student the problem card (Appendix W).</i> Ask: "How can you get the answer to $17 - 8 = ?$ " <i>Take note of the strategy that the student used and give credit for answers in which doubles were used. If the student counted back or counted on to solve the problem, no credit is given. For example, "I know that <math>8 + 8 = 16</math> and 1 more is 17."</i>		
		DP4	Say: "Use your understanding of doubles to solve this problem." <i>Show the student the problem card (Appendix W).</i> Ask: "How can you get the answer to $19 - 9 = ?$ " <i>Take note of the strategy that the student used and give credit for answers in which doubles were used. If the student counted back or counted on to solve the problem, no credit is given. For example, "I know that <math>9 + 9 = 18</math> and 1 more is 19."</i>		
5:13	Solve addition problems by using compatible numbers. (MCC.2.NBT.7)	BL	<i>Show the student the problem card consisting of a string of numbers (Appendix X).</i> Say: "Explain how you could solve this problem ( $5 + 2 + 5 - 10 = ?$ )" <i>Take note of the strategy that the student used and give credit for answers in which compatible numbers are used. If the student did not combine numbers that work well together and instead went in the order they saw them on the card, no credit is given. For example, students could see that <math>5 + 5 = 10</math>, <math>10 - 10 = 0</math>, and <math>0 + 2 = 2</math>.</i>		
		DP1	<i>Show the student the problem card consisting of a string of numbers (Appendix X).</i> Say: "Explain how you could solve this problem ( $9 + 1 + 5 - 6 = ?$ )" <i>Take note of the strategy that the student used and give credit for answers in which compatible numbers are used. If the student did not combine numbers that work well together and instead went in the order they saw them on the card, no credit is given. For example, students could see that <math>5 + 1 = 6</math>, <math>6 - 6 = 0</math>, and <math>0 + 9 = 9</math>.</i>		
		DP2	<i>Show the student the problem card consisting of a string of numbers (Appendix X).</i> Say: "Explain how you could solve this problem ( $7 + 8 + 2 - 9 = ?$ )" <i>Take note of the strategy that the student used and give credit for answers in which compatible numbers are used. If the student did not combine numbers that work well together and instead went in the order they saw them on the card, no credit is given. For example, students could see that <math>7 + 2 = 9</math>, <math>9 - 9 = 0</math>, <math>0 + 8 = 8</math>.</i>		
		DP3	<i>Show the student the problem card consisting of a string of numbers (Appendix X).</i> Say: "Explain how you could solve this problem ( $2 + 6 + 4 + 3 - 7 = ?$ )" <i>Take note of the strategy that the student used and give credit for answers in which compatible numbers are used. If the student did not combine numbers that work well together and instead went in the order they saw them on the card, no credit is given. For example, students could see that <math>4 + 3 = 7</math>, <math>7 - 7 = 0</math>, <math>2 + 6 = 8</math>, <math>8 + 0 = 8</math>.</i>		
		DP4	<i>Show the student the problem card consisting of a string of numbers (Appendix X).</i> Say: "Explain how you could solve this problem ( $4 + 6 + 4 + 3 - 7 = ?$ )" <i>Take note of the strategy that the student used and give credit for answers in which compatible numbers are used. If the student did not combine numbers that work well together and instead went in the order they saw them on the card, no credit is given. For example, students could see that <math>4 + 3 = 7</math>, <math>7 - 7 = 0</math>, <math>4 + 6 = 10</math>, <math>10 + 0 = 10</math>.</i>		
5:14	Solve addition and	BL	<i>Show the student the problem card (Appendix Y).</i> Say: "Use your knowledge of place value to solve the following		

Student Name: \_\_\_\_\_

Teacher: \_\_\_\_\_

Grade: \_\_\_\_\_

Tier: \_\_\_\_\_

subtraction problems by using place value partitioning. (MCC.2.NBT.7)		problem. There were 28 books on the shelf. Benji added 11 more books. How many books are on the shelf?" <i>Take note of the strategy that the student used and give credit for answers in which place value partitioning is used (student breaks the numbers down into their place value in the following manner: <math>28 + 11 = ?</math> is broken down as <math>20 + 10 = 30</math>, <math>8 + 1 = 9</math>, <math>30 + 9 = 39</math>). If the student uses a traditional algorithm, no credit is given.</i>		
	DP1	Show the student the problem card (Appendix Y). Say: "Use your knowledge of place value to solve the following problem. There are 16 girls on the playground. Then 38 boys come out to the playground. How many students are on the playground?" <i>Take note of the strategy that the student used and give credit for answers in which place value partitioning is used (student breaks the numbers down into their place value in the following manner: <math>16 + 38 = ?</math> is broken down as <math>10 + 30 = 40</math>, <math>6 + 8 = 14</math>, <math>40 + 14 = 54</math>). If the student uses a traditional algorithm, no credit is given.</i>		
	DP2	Show the student the problem card (Appendix Y). Say: "Use your knowledge of place value to solve the following problem. There are 23 fish in the aquarium. Mr. Caron buys 27 fish to add to the aquarium. How many fish are in the aquarium?" <i>Take note of the strategy that the student used and give credit for answers in which place value partitioning is used (student breaks the numbers down into their place value in the following manner: <math>23 + 27 = ?</math> is broken down as <math>20 + 20 = 40</math>, <math>3 + 7 = 10</math>, <math>40 + 10 = 50</math>). If the student uses a traditional algorithm, no credit is given.</i>		
	DP3	Show the student the problem card (Appendix Y). Say: "Use your knowledge of place value to solve the following problem. Kiersten saw 17 ducks swimming in the lake and 35 ducks flying above the lake. How many ducks did Kiersten see in all?" <i>Take note of the strategy that the student used and give credit for answers in which place value partitioning is used (student breaks the numbers down into their place value in the following manner: <math>17 + 35 = ?</math> is broken down as <math>10 + 30 = 40</math>, <math>7 + 5 = 12</math>, <math>40 + 12 = 52</math>). If the student uses a traditional algorithm, no credit is given.</i>		
	DP4	Show the student the problem card (Appendix Y). Say: "Use your knowledge of place value to solve the following problem. In the morning 74 cars drove over the bridge. In the afternoon 47 cars drove over the bridge. How many cars drove over the bridge in all that day?" <i>Take note of the strategy that the student used and give credit for answers in which place value partitioning is used (student breaks the numbers down into their place value in the following manner: <math>74 + 47 = ?</math> is broken down as <math>70 + 40 = 110</math>, <math>4 + 7 = 11</math>, <math>110 + 11 = 121</math>). If the student uses a traditional algorithm, no credit is given.</i>		
	BL	Show the student the problem card (Appendix Z). Say: "Use your knowledge of place value to solve the following problem. Gracie counted 63 chocolate bars. After lunch she noticed that 36 had melted. How many chocolate bars did not melt?" <i>Take note of the strategy that the student used and give credit for answers in which place value partitioning is used (example: student breaks the numbers down into their place value in the following manner: <math>63 - 36 = ?</math> is broken down as <math>63 - 30 = 33</math>; <math>33 - 3 = 30</math>; <math>30 - 3 = 27</math>). If the student uses a traditional algorithm, no credit is given.</i>		
	DP1	Show the student the problem card (Appendix Z). Say: "Use your knowledge of place value to solve the following problem. Terence planted 48 flowers in the flower bed. After a week of no rain 27 died. How many live flowers does he have left?" <i>Take note of the strategy that the student used and give credit for answers in which place value partitioning is used (example: student breaks the numbers down into their place value in the following manner: <math>48 - 27 = ?</math> is broken down as <math>48 - 20 = 28</math>; <math>28 - 7 = 21</math>). If the student uses a traditional algorithm no credit is given.</i>		
	DP2	Show the student the problem card (Appendix Z). Say: "Use your knowledge of place value to solve the following problem. Debbie took 83 cupcakes to the bake sale. She sold 59 cupcakes. How many cupcakes did Debbie have left?" <i>Take note of the strategy that the student used and give credit for answers in which place value partitioning is used (example: student breaks the numbers down into their place value in the following manner: <math>83 - 59 = ?</math> is broken down as <math>83 - 50 = 33</math>; <math>33 - 3 = 30</math>; <math>30 - 3 = 27</math>; <math>27 - 3 = 24</math>). If the student uses a traditional algorithm no credit is given.</i>		
	DP3	Show the student the problem card (Appendix Z). Say: "Use your knowledge of place value to solve the following problem. Juli the librarian received 64 books for the library. Students came and checked out 29 books. How many books were left?" <i>Take note of the strategy that the student used and give credit for answers in which place value partitioning is used (example: student breaks the numbers down into their place value in the following manner: <math>64 - 29 = ?</math> is broken down as <math>64 - 20 = 44</math>; <math>44 - 4 = 40</math>; <math>40 - 5 = 35</math>). If the student uses a traditional algorithm no credit is given.</i>		

Student Name: \_\_\_\_\_ Teacher: \_\_\_\_\_ Grade: \_\_\_\_\_ Tier: \_\_\_\_\_

		DP4	<i>Show the student the problem card (Appendix Z). Say: "Use your knowledge of place value to solve the following problem. Richie picked 71 blackberries. He ate 38 of them. How many blackberries does he have left?" Take note of the strategy that the student used and give credit for answers in which place value partitioning is used (example: student breaks the numbers down into their place value in the following manner: <math>71 - 38 = ?</math> is broken down as <math>71 - 30 = 41</math>; <math>41 - 1 = 40</math>; <math>40 - 5 = 35</math>; <math>35 - 2 = 33</math>). If the student uses a traditional algorithm no credit is given.</i>		
5:15	Solve addition and subtraction problems by compensating with benchmark numbers. (MCC.2.NBT.7)	BL	<i>Show the student the problem card (Appendix AA). Say: "Use your knowledge of benchmark numbers to solve the following problem. Yasmine ran 28 miles so far. She wants to run a total of 81 miles by the end of the year. How many more miles does she need to run?" Take note of the strategy that the student used and give credit for answers in which compensating with benchmark numbers is used (example: <math>28 + 2 = 30</math>, <math>30 + 50 = 80</math>, <math>80 + 1 = 81</math> so she needs to run 53 more miles). If the student uses a traditional algorithm no credit is given.</i>		
		DP1	<i>Show the student the problem card (Appendix AA). Say: "Use your knowledge of benchmark numbers to solve the following problem. Jacob picked 16 strawberries. He then picked 42 more. How many strawberries did Jacob pick?" Take note of the strategy that the student used and give credit for answers in which compensating with benchmark numbers is used (example: <math>16 + 4 = 20</math>, <math>20 + 38 = 58</math>, so he picked 58 strawberries). If the student uses a traditional algorithm no credit is given.</i>		
		DP2	<i>Show the student the problem card (Appendix AA). Say: "Use your knowledge of benchmark numbers to solve the following problem. Graham's football team scored 17 points in the first half of the game. At the end of the game, the team scored a total of 34 points. How many points did they earn during the second half?" Take note of the strategy that the student used and give credit for answers in which compensating with benchmark numbers is used (example: <math>17 + 3 = 20</math>, <math>20 + 10 = 30</math>, <math>30 + 4 = 34</math>, so the team scored 17 points during the second half). If the student uses a traditional algorithm no credit is given.</i>		
		DP3	<i>Show the student the problem card (Appendix AA). Say: "Use your knowledge of benchmark numbers to solve the following problem. A copy machine makes 58 copies on Monday and 33 copies of Tuesday. How many copies did the machine make on both days?" Take note of the strategy that the student used and give credit for answers in which compensating with benchmark numbers is used (example: <math>58 + 2 = 60</math>, <math>60 + 30 = 90</math>, and <math>90 + 1 = 91</math>, so the machine makes 91 copies). If the student uses a traditional algorithm no credit is given.</i>		
		DP4	<i>Show the student the problem card (Appendix AA). Say: "Use your knowledge of benchmark numbers to solve the following problem. Daniel read 69 pages in his book. To finish the book, he would have to read 41 more. How many pages are in Daniel's book?" Take note of the strategy that the student used and give credit for answers in which compensating with benchmark numbers is used (example: <math>69 + 1 = 70</math>, <math>70 + 30 = 100</math>, and <math>100 + 1 = 101</math> so there are 101 pages in Daniel's book). If the student uses a traditional algorithm no credit is given.</i>		
5:16	Solve multiplication problems by using repeated addition. (MCC.2.OA.4)	BL	<i>Show the student the problem card (Appendix AB). Say: The bleachers at the soccer field had 3 rows. Each row had 6 seats. How many seats are there? Credit is given if the student uses repeated addition or knowledge of the multiplication fact to solve the problem.</i>		
		DP1	<i>Show the student the problem card (Appendix AB). Say: The strawberry field has 2 rows of strawberries. In each row, there are 8 strawberries. How many strawberries are in the field? Credit is given if the student uses repeated addition or knowledge of the multiplication fact to solve the problem.</i>		
		DP2	<i>Show the student the problem card (Appendix AB). Say: Ms. Jones' classroom has 4 rows of desks. Each row has 7 desks. How many desks are in Ms. Jones' classroom? Credit is given if the student uses repeated addition or knowledge of the multiplication fact to solve the problem.</i>		
		DP3	<i>Show the student the problem card (Appendix AB). Say: The trees at the apple orchard are in 5 rows. There are 2 trees in each row. How many trees are in the orchard? Credit is given if the student uses repeated addition or</i>		

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			<i>knowledge of the multiplication fact to solve the problem.</i>		
		DP4	<i>Show the student the problem card (Appendix AB). Say: An ice cube tray has 2 rows of ice cubes. Each row has 9 ice cubes. How many ice cubes are in each tray? Credit is given if the student uses repeated addition or knowledge of the multiplication fact to solve the problem.</i>		
5:17	Solve fives times tables by doubling and halving. (MCC.3.OA.3)	BL	<i>Show the student the problem card (Appendix AC). Say: Use your knowledge of the doubling and halving strategy to solve the problem. Joe has 5 packs of 6 cokes. How many cokes does Joe have? Credit is given if the student uses the doubling and halving strategy (example: I can double 5 to make 10 and half 6 to make 3. <math>10 \times 3 = 30</math>).</i>		
		DP1	<i>Show the student the problem card (Appendix AC). Say: Use your knowledge of the doubling and halving strategy to solve the problem. Michael has 5 packs of t-shirts. Each pack has 4 t-shirts. How many t-shirts does Michael have? Credit is given if the student uses the doubling and halving strategy (example: I can double 5 to make 10 and half 4 to make 2. <math>10 \times 2 = 20</math>).</i>		
		DP2	<i>Show the student the problem card (Appendix AC). Say: Use your knowledge of the doubling and halving strategy to solve the problem. Krystal has 5 packs of 8 juice boxes. How many juice boxes does Krystal have? Credit is given if the student uses the doubling and halving strategy (example: I can double 5 to make 10 and half 8 to make 4. <math>10 \times 4 = 40</math>).</i>		
		DP3	<i>Show the student the problem card (Appendix AC). Say: Use your knowledge of the doubling and halving strategy to solve the problem. Meghan has 5 packs of peanut butter cups. Each pack has 2 peanut butter cups. How many peanut butter cups does Meghan have? Credit is given if the student uses the doubling and halving strategy (example: I can double 5 to make 10 and half 2 to make 1. <math>10 \times 1 = 10</math>).</i>		
		DP4	<i>Show the student the problem card (Appendix AC). Say: Use your knowledge of the doubling and halving strategy to solve the problem. Mollie has 5 bunches of 4 apples. How many apples does Mollie have? Credit is given if the student uses the doubling and halving strategy (example: I can double 5 to make 10 and half 4 to make 2. <math>10 \times 2 = 20</math>).</i>		
5:18	Find unit fractions of sets. (MCC.3.NF.1)	BL	<i>Show the student the problem card (Appendix AD). Say: There are 8 cows. One fourth of the cows need to be placed in the barn. How many cows will be placed in the barn?</i>		
		DP1	<i>Show the student the problem card (Appendix AD). Say: There are 10 lady bugs. One fifth of the lady bugs sit on each leaf. How many lady bugs sit on each leaf?</i>		
		DP2	<i>Show student the problem card (Appendix AD). Say: Terrance had 20 jellybeans. He gave one tenth of his jelly beans to each friend. How many jellybeans did each friend receive?</i>		
		DP3	<i>Show the student the problem card (Appendix AD). Say: There were 12 students in the class. One third of the students were wearing stripes. How many students were wearing stripes?</i>		
		DP4	<i>Show the student the problem card (Appendix AD). Say: Kayla had 14 pens. She gave half of her pens to Casey. How many pens does Kayla have left?</i>		
5:19	Find unit fractions of regions. (MCC.2.G.3)	BL	<i>Show the student the problem card (Appendix AE). Say: Three people are sharing one sub sandwiches. How much of the sub sandwich will each person get to eat?</i>		
		DP1	<i>Show the student the problem card (Appendix AE). Say: Four people are sharing five sub sandwiches. How much of the sub sandwiches will each person get to eat?</i>		
		DP2	<i>Show the student the problem card (Appendix AE). Say: Two people are sharing one sub sandwich. How much of the sub sandwich will each person get to eat?</i>		
		DP3	<i>Show the student the problem card (Appendix AE). Say: Two people are sharing three sub sandwiches. How much of the sub sandwich will each person get to eat?</i>		

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		DP4	Show the student the problem card (Appendix AE). Say: Three people are sharing four sub sandwiches. How much of the sub sandwich will each person get to eat?		
5:20	Solve division problems by sharing. (MCC.3.OA.2)	BL	Provide the student with a collection of 20 counters. Say: You have 20 candies. 4 candies go in a packet. How many packets can you make? Credit is given even if the students use the counters to model fair sharing.		
		DP1	Provide the student with a collection of 14 counters. Say: You have 14 candies. 2 candies go in a packet. How many packets can you make? Credit is given even if the students use the counters to model fair sharing.		
		DP2	Provide the student with a collection of 18 counters. Say: You have 18 candies. 6 candies go in a packet. How many packets can you make? Credit is given even if the students use the counters to model fair sharing.		
		DP3	Provide the student with a collection of 24 counters. Say: You have 24 candies. 3 candies go in a packet. How many packets can you make? Credit is given even if the students use the counters to model fair sharing.		
		DP4	Provide the student with a collection of 15 counters. Say: You have 15 candies. 3 candies go in a packet. How many packets can you make? Credit is given even if the students use the counters to model fair sharing.		

**Individual Stage Data:**

Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
BL: ___/27	DP1: ___/27	DP2: ___/27	DP3: ___/27	DP4: ___/27	DP5: ___/27	DP6: ___/27	DP7: ___/27
Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
DP8: ___/27	DP9: ___/27	DP10: ___/27	DP11: ___/27	DP12: ___/27	DP : ___/27	DP : ___/27	DP : ___/27

BL = Baseline DP = Data Point

**Accumulated Stages Data:** (stage 1 plus stage 2 plus stage 3 plus stage 4 plus stage 5)

Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
BL: ___/93	DP1: ___/93	DP2: ___/93	DP3: ___/93	DP4: ___/93	DP5: ___/93	DP6: ___/93	DP7: ___/93
Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
DP8: ___/93	DP9: ___/93	DP10: ___/93	DP11: ___/93	DP12: ___/93	DP : ___/93	DP : ___/93	DP : ___/93

BL = Baseline DP = Data Point

# NZ Numeracy Project

## Activities and Stages

Activity Name	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
<b>A</b>						
Adding and Subtracting with Counters		X	X	X		
Adding and Subtracting with One Hand	X	X	X			
Adding in Parts					X	
Adding Tens				X		
Adding Tens and Ones				X		
Addition Dice				X		
Addition Flash Cards				X		
A Little Bit More – A Little Bit Less						X
Animal Arrays					X	
Animals					X	
Array Games				X		
Arrow Cards		X	X	X		
<b>B</b>						
Balancing Act						X
Bead Bridges						
Bead Strings	X?	X?	X	X		
Beep				X		
Before and After	X	X				
Birthday Cakes	X	X	X			
Biscuit Boxes				X		
Blank Grids				X		
Blast Off in 5	X					
Both Hands		X	X			
Bowl a Fact			X		X	X
Bridges Game				X	X	X
Building Teens				X		
<b>C</b>						
Can You Guess?					X	
Card Ordering	X	X	X	X		
Caterpillar Legs	X	X	X			
Chains		X				
Challenging Hands Problems		X				
Change Unknown				X		
Clapping	X	X	X	X		
Close to 100				X		
Close to 1000					X	
Close to One						X
Comparing Small Collections	X					
Comparisons					X	
Comparisons with Counters	X					
Comparisons with Fingers	X					
Comparisons with Number Cards		X	X	X		

Compatible Numbers					X	
Compatible Numbers to Ten		X	X			
Counters in a Row			X			
Counting	X	X	X	X		
Counting As We Go	X	X	X	X		
Counting Back				X		
Creating Fractions					X	
Crossing the Five Barrier			X			
<b>D</b>						
Dice Groups						
Dinosaur Stomp		X			X	
Dividing Fractions						
Domino Addition						
Double Trouble						
<b>E</b>						
Establishing a Collection of Specified Numerosity						
Establishing a Numerosity of a Collection						
Establishing a Numerosity of Two Collections						
<b>F</b>						
Fabulous Five	X					
Fabulous Fives		X				
Facts to 10	X					
Fair Shares						
Feed the Elephants	X	X				
Finger Patterns to 5	X					
Finger Patterns to 10		X				
Five Sweets Per Packet						
Flower Petals	X	X				
Fly Flip						
Fraction Animals				X	X	
Fraction Circles						
Fraction Pieces						
Fractional Blocks						
Fractions in a Whole						
Frog Jumps						
<b>G</b>						
Give Me Five	X					
Goesintas					X	X
<b>H</b>						
Hot Stuff!					X	
How Many	X	X				
How Many Claps in All?	X	X				
How Many Cubes	X	X				
How Many Now						
How Many Taps	X	X				
How Many Tens and Hundred						
Hundreds Boards and Thousands Books						

Hungry Birds						
<b>I</b>						
Imaging Many Hands			X	X		
Imaging with Tens Frames						
Increase and Decrease in the Range 1 - 6						
<b>J</b>						
Jumping the Number Line					X	
<b>K</b>						
Knocks and Taps			X	X		
<b>L</b>						
Lily Pads	X	X	X	X		
Loopy						X
Loud and Soft	X	X	X			
Lucky Dip	X	X	X	X		
<b>M</b>						
Making Ten				X		
Making Tens			X			
Match It Up	X	X				
Mixing the methods – Mental Exercises for the Day						X
More Comparisons						
More Geoboard Fractions						
More Ones and Tens			X	X		
Multiplication or Out						
Multiplication Smorgasbord						
Multiplication Stories						
<b>N</b>						
Number Boggle				X		
Number Fans	X	X	X	X		
Number Hangman				X	X	
Number Line Flips	X	X	X	X		
Number Mat	X	X				
Number Strips				X		
Number Tiles				X		
<b>O</b>						
On and Off the Train					X	
On the Mat						
Ones and Tens						
Ordering Numerals						
<b>P</b>						
Pass it On						
Patterns to 10						
Peek-a-Boo Adding				X		
People's Ages						
Pipe Cleaner Numbers	X	X	X	X		
Pirate Crews						
Place Value Houses						
Playdough Fractions				X	X	

Playdough Fractions – Feeding Animals				X	X	
Playdough Fractions – Same but Different				X	X	
Problems Like $23 + ? = 71$						
Q						
R						
Rekenrek Patterns to Five	X					
Rekenrek Patterns to Ten		X	X			
Rekenrek Reinforcing Five Grouping			X			
Rekenrek Reinforcing Ten Grouping			X			
Reversing Addition						X
Rocket – Where Will I Fit?	X	X	X	X	X	X
S						
Saving Hundreds					X	
Smiley Hundred						
Squeeze – Guess My Number						
Subtracting Tens						
Subtracting Tens and Ones						
Subtraction in Parts						
T						
Teddy Bear Walk - Addition				X		
Teddy Bear Walk – Addition & Subtraction				X		
Teen and Ty Numbers				X		
Teen Numbers				X		
Teens and Fingers		X	X	X		
Tens Frames	X	X	X	X		
Tens Frame Flashes – Empty Spaces	X	X				
Tens Frame Flashes – Black Dots						
Tens Frame Game	X	X				
Tens Frames Teen Numbers				X		
Tens in Tens			X	X		
Ten Sweets Per Pack						
The Bear Picnic						
The Bigger Number First						
The Missing Tens and Ones						
The Number Strip						
The Thousands Book						
Three or More at a Time						
Three's Company						
Tick Tock	X	X	X	X		
Toy Box	X	X				
Turtles 5 and ....						
Twos, Fives and Tens						
U						
Up or Down						
Up Over Ten						
Up to Ten						

Using Calculators						
Using Fives						
Using One Hand						
V						
W						
Wafers				X		
Walk the Bridge	X	X	X			
What's Hidden			X	X	X	X
When Subtraction Becomes Addition						
Where Do I Go?	X	X				
Who is the Richest?	X	X	X	X	X	X
X						
Y						
You Don't Need the Number						
Z						
Zap				X	X	



			1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
			1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
			1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
			1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
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			1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
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		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
		1-on-1 Small group of 2 or 3 Small group of 4 or 5	15 min. 20 min. 25 min. 30 min. More than 30 min. _____

EXAMPLE

# NZ Numeracy Project Document Sheet

RTI Tier Level: 2

Student Name: *Henny Penny*

Grade: 2<sup>nd</sup>

Teacher: *Mrs. Crabapple*

Date	Stage	Activity Name	Delivery Method	Length of Session
8-15-13	2	<i>Arrow Cards</i>	1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
8-16-13	2	<i>Arrow Cards</i>	1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
8-19-13	2	<i>Arrow Cards</i> <i>Lily Pads</i>	1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. <u>45 min</u>
8-23-13	2	<i>Lily Pads</i>	1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
8-24-13	2	<i>Number Fans</i>	1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
8-26-13	2	<i>Number Fans</i>	1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
9-2-13	2	<i>Arrow Cards</i>	1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
9-3-13	2	<i>Clapping</i>	1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
9-4-13	2	<i>Clapping</i>	1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____
9-9-13	2	<i>Walk the Bridge</i>	1-on-1 Small group of 2 or 3 Small group of 4 or 5 Group of 6 or more Whole Group	15 min. 20 min. 25 min. 30 min. More than 30 min. _____





## NZ Numeracy Project Skill Descriptions Aligned to CCGPS

	Skill Descriptions	Aligned to CCGPS
1:1	Rote counting 0-10	<i>MCC.K.CC.1</i>
1:2	Saying the forwards and backwards number word sequence in the range 0-10, starting and ending with any number	<i>MCC.K.CC.2</i>
1:3	Numeral recognition 0-10	<i>MCC.K.CC.3</i>
1:4	Number order: What comes before and after a given number in the range 0-10	<i>MCC.K.CC.2</i>
1:5	Ordering the numbers in the range 0-10	<i>MCC.K.CC.7</i>
1:6	Counting sets 0-10	<i>MCC.K.CC.5</i>
1:7	Forming sets 0-10	<i>MCC.K.CC.4</i>
1:8	Comparing two sets in the range 0-10	<i>MCC.K.CC.7</i>
1:9	Recognizing patterns to 5	<i>MCC.K.OA.1</i>
2:1	Rote counting 0-20	<i>MCC.K.CC.1</i>
2:2	Saying the forwards and backwards number word sequence in the range 0-20, starting and ending with any number	<i>MCC.K.CC.2</i>
2:3	Numeral recognition 0-20	<i>MCC.K.CC.3</i>
2:4	Number order: What comes before and after a given number in the range 0-20	<i>MCC.K.CC.2</i>
2:5	Ordering the numbers in the range 0-20	<i>MCC.1.NBT.3</i>
2:6	Counting sets 0-20	<i>MCC.K.CC.5</i>
2:7	Forming sets 0-20	<i>MCC.K.CC.4</i>
2:8	Comparing two numbers in the range 0-20 using number cards	<i>MCC.1.NBT.3</i>
2:9	Instantly recognizing patterns to 10	<i>MCC.K.OA.1</i>
2:10	Solving addition problems to 20 by joining sets and counting all the objects	<i>MCC.K.OA.2</i> <i>MCC.1.OA.6</i>
2:11	Solving subtraction problems from 20 separating sets and counting all the objects	<i>MCC.K.OA.2</i> <i>MCC.1.OA.1</i>
3:1	Rote counting 0-50	<i>MCC.K.CC.1</i>
3:2	Saying the forwards and backwards number word sequence in the range 0-50, starting and ending with any number	<i>MCC.K.CC.3</i>
3:3	Numeral recognition 0-50	<i>MCC.1.NBT.1</i>
3:4	Number order: What comes before and after a given number in the range 0-50	<i>MCC.K.CC.2</i>
3:5	Ordering the numbers in the range 0-50	<i>MCC.K.CC.2</i>
3:6	Counting up to 50 objects by grouping the objects in tens	<i>MCC.1.NBT.2</i>
3:7	Comparing two numbers in the range 0-50 using number cards	<i>MCC.1.NBT.3</i>
3:8	Instantly recognizing patterns to 10, including doubles	<i>MCC.K.OA.1</i>
3:9	Recalling facts within 5, and doubles to 10	<i>MCC.K.OA.5</i> <i>MCC.1.OA.6</i>
3:10	Solving addition problems to 20 by counting all the objects in their head	<i>MCC.1.OA.6</i>
3:11	Solving subtraction problems from 20 by counting all the objects in their head	<i>MCC.1.OA.6</i>
3:12	Solving addition and subtraction problems with decade numbers by counting tens in their head	<i>MCC.1.NBT.5</i> <i>MCC.1.NBT.6</i>

4:1	Rote counting 0-100	<i>MCC.K.CC.1</i>
4:2	Saying the forwards and backwards number word sequence in the range 0-100, starting and ending with any number	<i>MCC.K.CC.2</i>
4:3	Numeral recognition 0-100	<i>MCC.1.NBT.1</i>
4:4	Number order: What comes before and after a given number in the range 0-100	<i>MCC.K.CC.2</i>
4:5	Ordering the numbers in the range 0-100	<i>MCC.1.NBT.3</i>
4:6	Comparing two numbers in the range 0-100 using number cards	<i>MCC.1.NBT.3</i>
4:7	Saying the forwards and backwards number word sequences in the range 0-100 for twos, fives, and tens	<i>MCC.2.NBT.2</i>
4.8	Recalling the facts up to 10, and the teen facts	<i>MCC.1.OA.6</i>
4:9	Recalling the number of 10s within decades that add to 100	<i>MCC.1.NBT.4</i>
4:10	Solving addition problems to 100 by counting on in their head	<i>MCC.2.NBT.5</i>
4:11	Solving subtraction problems to 100 by counting back in their head	<i>MCC.2.NBT.5</i>
4:12	Solving addition and subtraction problems using groups of tens	<i>MCC.1.NBT.4</i> <i>MCC.1.NBT.6</i> <i>MCC.2.NBT.8</i>
4.13	Solving multiplication problems using skip counting by twos, fives, and tens.	<i>MCC.3.OA.1</i> <i>MCC.3.OA.3</i>
4:14	Solve division problems by equal sharing in ones, twos, and fives	<i>MCC.3.OA.2</i> <i>MCC.3.OA.3</i>
4:15	Finding halves and quarters of sets, regions, and objects by sharing	<i>MCC.3.OA.2</i> <i>MCC.3.OA.3</i>
4:16	Finding simple fractions of regions	<i>MCC.1.G.3</i> <i>MCC.2.G.3</i> <i>MCC.3.G.3</i>
4:17	Finding fractions of sets by sharing	<i>MCC.3.NF.1</i>
5:1	Identify numbers in the range 0-1,000	<i>MCC.2.NBT.3</i>
5:2	Say the forwards and backwards number word sequences by ones, ten, hundreds, and thousands in the range of 0-1,000,000, including finding numbers that are 10, 100, and 1,000 more or less than a given number	<i>MCC.4.NBT.2</i>
5:3	Order the numbers in the range 0-1,000	<i>MCC.2.NBT.4</i>
5:4	Recall the number of tens and hundreds in 100s and 1,000s	<i>MCC.2.NBT.1</i>
5:5	Round three digit whole numbers to the nearest 10 or 100	<i>MCC.3.NBT.1</i>
5:6	Recall the multiples of 100 that add up to 1,000	<i>MCC.3.NBT.2</i>
5:7	Identify the symbols for halves, quarters, thirds, fifths, and tenths including fractions greater than 1	<i>MCC.3.NF.1</i>
5.8	Order fractions with the same denominator	<i>MCC.3.NF.3</i>
5:9	Know the number 1, 10, and 100 before and after a given number in the range 0-1,000	<i>MCC.2.NBT.8</i>
5:10	Recall addition and subtraction facts to 20	<i>MCC.2.OA.2</i>
5:11	Recall groupings within 100	<i>MCC.2.NBT.5</i>
5:12	Solve addition and subtraction problems by using doubles	<i>MCC.2.NBT.7</i>
5.13	Solve addition problems by using compatible numbers	<i>MCC.2.NBT.7</i>
5:14	Solve addition and subtraction problems by using place value partitioning	<i>MCC.2.NBT.7</i>
5:15	Solve addition and subtraction problems by compensating with tidy	<i>MCC.2.NBT.7</i>

	numbers	
5:16	Solve multiplication problems by using repeated addition	<i>MCC.2.OA.4</i>
5:17	Solve five times tables by doubling and halving	<i>MCC.3.OA.3</i>
5:18	Find unit fractions of sets	<i>MCC.3.NF.1</i>
5:19	Find unit fractions of regions	<i>MCC.2.G.3</i>
5:20	Solve division problems by sharing	<i>MCC.3.OA.2</i>