Lebanon Borough Public School

Mathematics

Curriculum Guide

First Grade

Approved by the Lebanon Borough Board of Education

December 10, 2020/Revised:

Introduction

The Lebanon Borough School believes in celebrating the rich history of community partnerships created through sharing of services with neighboring school systems in Hunterdon County. This ensures a consistent, high quality instruction for all learners. The math curriculum is built upon this belief by incorporating the NJSLS Math Grade Level Standards within the components of a balanced literacy framework. This approach provides all students with equitable access to the same learning goals while allowing teachers the flexibility to adapt to the needs of their learners.

The standards below are overarching. While these standards may not appear specifically in any unit, they are the collective goals of all units.

In addition to the content standards for each grade level, the guides connect these to the critical mathematical practice standards as listed below:

- Make sense of problems and persevere in solving them. (MP1))
- Reason abstractly and quantitatively. (MP2)
- Construct viable arguments and critique the reasoning of others. (MP3)
- Model with mathematics. (MP4)
- Use appropriate tools strategically. (MP5)
- Attend to precision. (MP6)
- Look for and make use of structure. (MP7)
- Look for and express regularity in repeated reasoning. (MP8)

First Grade Math At A Glance

TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
МАТН	МАТН	МАТН
Focus: Represent and solve problems involving addition and subtraction within 12, including missing addends (addition only).	Focus: Represent and solve problems involving addition and subtraction within 20, including missing addends (addition and subtraction within 10).	Focus: Represent and solve problems involving addition and subtraction within 20, including missing addends in all positions (addition and subtraction within 20).
Focus: Demonstrate fluency for addition within 12.	Focus: Demonstrate fluency for addition (within 20) and subtraction (within 10). Use a variety of strategies to add and subtract within 20.	Focus: Demonstrate fluency for addition and subtraction within 20.
Focus: Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 12.	Focus: Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.	Focus: Measure lengths indirectly and by iterating length units.
Focus: Extend the counting sequence to 120.		Focus: Tell and write time in hours and half- hours using analog and digital clocks.
	Focus: Understand place value. Use place value understanding and properties of operations to add and subtract.	Focus: Represent and interpret data.
	Focus: Work with addition and subtraction equations to determine if equations are true or false.	Focus: Reason with shapes and their attributes.

First Grade Trimester Priority Standards

1	RIMESTER 1	ſ	TRIMESTER 2		TRIMESTER 3
NJSLS	By the end of Trimester 1, students can:	NJSLS	By the end of Trimester 2, students can:	NJSLS	By the end of Trimester 3, students can:
1.NBT.A.1	I can count from any number to 120.			1.0A.C.6	I can add and subtract fluently within 20.
1.NBT.A.1	I can read and write numbers up to 120.	1.0A.A.2	I can solve word problems by adding three numbers whose sum is less than or equal to 20.	1.0A.D.8	I can figure out a missing number in an addition or subtraction equation within 20, in all positions.
1.0A.C.5	I can count on to add. I can count back to subtract.	1.0A.C.6	I can fluently add within 20.	1.MD.B.3	I can tell and write time to the hour and half hour.
1.0A.C.6	I can fluently add within 12.	1.0A.C.6	I can fluently subtract within 10.	1.MD.B.3	I can tell and write time using analog and digital clocks.
1.0A.C.6	I can use mental strategies to add and subtract within 12.	1.0A.C.6	I can use mental strategies to add and subtract within 20.	1.MD.C.4	I can organize data into three groups or less.
1.0A.A.1	I can solve addition and subtraction word problems within 12.	1.0A.A.1	I can solve addition and subtraction word problems within 20.	1.MD.C.4	I can ask and answer questions about data.
1.0A.D.8	I can figure out a missing number in an addition equation.	1.0A.D.8	I can figure out a missing number in an addition or subtraction equation within 10.	1.MD.A.1	I can put objects in order by length.
1.0A.B.4	I can use addition facts to solve subtraction problems.	1.0A.A.2	I can solve word problems by adding three numbers whose sum is less than or equal to 20.	1.MD.A.1	I can use one object to compare the lengths of two other objects.
1.0A.B.3	I can use strategies to make it easier to add and subtract.	1.0A.D.7	I can figure out if an equation is true or false.	1.MD.A.2	I can measure objects with nonstandard units.
		1.0A.B.4	I can use addition facts to solve subtraction problems.	1.G.A.1	I know the difference between attributes that define a shape and attributes that describe a shape.
		1.0A.B.3	I can use strategies to make it easier to add and subtract.	1.G.A.1	I can build and draw shapes with certain attributes.
		1.NBT.B.2	I understand that two-digit numbers contain tens and ones.	1.G.A.2	I can build two-dimensional and three- dimensional figures from other

				figures.
1.N	NBT.B.2a	I know that 10 is ten ones, or a ten.	1.G.A.3	I can divide circles and rectangles into
				two or four equal parts.
1.N	NBT.B.2b	I know that the numbers 11-19	1.G.A.3	I can name the smaller parts.
		have a ten and some ones.		
1.N	NBT.B.2c	I can tell how many tens and ones		
		are in the multiples of ten.		
1.N	NBT.B.3	I can compare two 2-digit		
		numbers.		
1.N	NBT.C.5	I can explain how to find 10 more		
		or 10 less than a two-digit number.		
1.N	NBT.C.4	I can add a 2-digit number to a 1-		
		digit or 2-digit number (multiple		
		of 10) within 100.		
1.N	NBT.C.6	I can explain how to subtract		
		multiples of 10 from other		
		multiples of 10 up to 90.		

Lebanon Borough Public School Instructional Unit							
Content:	Mathematics			Grade:	1		
Trimester:	1	Unit 1	Numeration	Pacing:	2 weeks		
CRITICAL AREAS OF FOCUS FOR 1 st Grade							
In grade 1, instructional time should focus on four critical areas: 1. Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; 2. Developing understanding of whole number relationships and place value, including grouping in tens and ones; 3. Developing understanding of linear measurement and measuring lengths as iterating length units; and 4. Reasoning about attributes of, and composing and decomposing geometric shapes. 1. Students develop strategies for adding and subtracting whole numbers. They use a variety of methods, including discrete objects, to model add-on, take from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition and subtraction problems within 20. By comparing a variety of solution strategies, children build their understanding of the relationship between addition and subtraction. 2. Students develop, discuss, and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones). Through activities that build number sense, they understanding of the meaning and processes of measurement, including underlying concepts such as iterating (building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement. 4. Students compose and decompose plane or solid figures to build understanding of part-whole relationships as well as the properties of the original and composite shapes. As they combine shapes, th							
		E	SSENTIAL QUESTION				
How is countin	How is counting with numbers greater than 100 similar to counting with smaller numbers?						
		Т	ARGET STANDARDS				
Math NJSLS	I Can		Mathematical Practice Stands	ard	Benchmark Assessment (Place an X or N/A)		
1.NBT.A.1	Count from any number to 12	20.	MP.2, MP.7, MP.8.		N/A		
1.NBT.A.1	Read and write numbers up t	o 120.	MP.2, MP.7, MP.8		Х		
		INSTR	UCTIONAL PROGRESSION				

Weekly Plan	Concept	Go Math Connection	Vocabulary	Evidence of Learning			
During	Orally count numbers to 120.	Supplemental	One-hundred, number chart	Teacher			
Week 1				Observation			
During	Read and write numbers to 120.	Lesson 7-4;	Digit, row, column, number chart	Completing a			
Week 2		Readiness		number chart,			
		from Topic 1		filling in missing			
numbers							
	Additional Resources						
Number char	Number charts						
Pearsonrealize	Pearsonrealize.com						
http://www.	http://www.kidport.com/Grade1/Math/NumberSense/G1-M-NS1-1-1.htm						
http://www.k	idport.com/Grade1/Math/NumberSense/G1-M-NS-Sequencing.h	ntm					
Special No	tes:						
Use Topic To	ests in Assessment Sourcebook at your discretion.						
Use at least	1 Performance Task in your instruction in Trimester 1.						
	,						

Special EducationELLI&RSENRICH• Provide modifications & accommodations as listed in the student's IEP• Use Go Math Spanish Resources • Provide text to speech for math problems• Tiered Interventions following I&RS framework• Process should be modification game order thinking, discovery• Position student near helping peer or have quick access to teacher• Use of translation dictionary or software• NIDOE resources • Math Lab• Utilize project-based lea greater depth of knowley• Modify or reduce assignments/tests different mode of delivery • Utilize working contract between you and student at risk• Implement strategy groups • Modification plan • Modification plan • Adapt a Strategy-Adjusting• Other strategy-Adjusting
 Provide modifications & accommodations as listed in the student's IEP Position student near helping peer or have quick access to teacher Modify or reduce assignments/tests Reduce length of assignment for different mode of delivery Increase one-to-one time Utilize working contract between you and student at risk Use Go Math Spanish Resources Provide text to speech for math problems Tiered Interventions following I&RS framework IkRS Intervention Bank Use of translation dictionary or software Implement strategy groups Confer frequently Provide graphic organizers Modification plan NJDOE resources Adapt a Strategy-Adjusting Tiered Interventions following I&RS framework IkRS Intervention Bank Use of translation dictionary or software Use of translation dictionary or software Use of translation dictionary or software Implement strategy groups Confer frequently Provide graphic organizers Modification plan NJDOE resources Adapt a Strategy-Adjusting
 Prioritize tasks Provide manipulatives Use graphic organizers Use interactive math journals Use online resources for skill building Provide teacher notes Use collaborative grouping strategies such small groups Use GoMath online resources NIDOE resources NIDOE resources
CROSS CURRICULUR RESOURCES
Literacy in Mathematics: http://www.readwritethink.org/search/?resource_type=6&q=math&sort_order=relevance
Grade 3-5 STEM resource: http://www.kineticcity.com/
K-12 STEM Educator and Career Resource: <u>http://www.egfi-k12.org/</u>
ALIGNMENT TO 21 st CENTURY SKILLS AND TECHNOLOGY
21 st Century/Interdisciplinary Themes: Bold all that apply 21 st Century Skills: Bold all that apply
Global AwarenessCreativity & InnovationFinancial, Economic, Business and Entrepreneurial LiteracyCritical Thinking & Problem SolvingCivic LiteracyCommunication & CollaborationHealth LiteracyMedia LiteracyEnvironmental LiteracyInformation LiteracyInformation, Communication & TechnologyLife 0, General Girlle

Technology Infusion

National Library of Virtual Manipulatives http://nlvm.usu.edu/en/nav/vlibrary.html

Math Resources for Technology <u>https://drive.google.com/file/d/0B4Zh_BcwMUEMOFRfSXZpdW9Yams/view?usp=sharing</u>

Smart Board Applications

Go Math applications and online resources

Evidence of Student Learning

- Common benchmark
- Observation
- Evaluation rubrics
- Self-reflections
- Teacher-student conferences
- Running records
- Performance Tasks
- Unit tests
- Quizzes

CRP Standards

CRP1. Act as a responsible and contributing citizen and employee.

CRP2. Apply appropriate academic and technical skills.

- CRP3. Attend to personal health and financial well-being.
- CRP4. Communicate clearly and effectively and with reason.
- CRP5. Consider the environmental, social and economic impacts of decisions.
- CRP6. Demonstrate creativity and innovation.
- CRP7. Employ valid and reliable research strategies.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP9. Model integrity, ethical leadership and effective management.

CRP10. Plan education and career paths aligned to personal goals.

CRP11. Use technology to enhance productivity.

Lebanon Borough Public School Instructional Unit							
Content:	Mathematics			Grade:	1		
Trimester:	1	Unit 2	Understanding Addition	Pacing:	5 weeks		
		CRITICAL A	REAS OF FOCUS FOR 1 st Grade				
In grade 1, inst 1. Develop 2. Develop 3. Develop 4. Reasoni 1. Students dev from, put-tog solve arithm the same as on these pro build their u 2. Students dev numbers (at 100 in terms sense, they u 3. Students dev length of an 4. Students com composite sh determine ho and symmet	ructional time should focus on for ing understanding of addition, sul ing understanding of whole numb ing understanding of linear measu- ng about attributes of, and compo- relop strategies for adding and su gether, take-apart, and compare s etic problems with these operation counting on two). They use prope perties (e.g., "making tens") to sol nderstanding of the relationship b relop, discuss, and use efficient, ac least to 100) to develop understa of tens and ones (especially reco- nderstand the order of the counti- relop an understanding of the mea- object with equal-sized units) and npose and decompose plane or so napes. As they combine shapes, th ow they are alike and different, to ry.	ar critical areas: otraction, and stra- per relationships a arement and meas- sing and decompo- peracting whole n ituations to devel ns. Students under rties of addition t ve addition and s etween addition a curate, and gener nding of and solve gnizing the numb ng numbers and t aning and process I the transitivity p lid figures to build ey recognize then develop the back	Attegies for addition and subtraction within 20; and place value, including grouping in tens and o suring lengths as iterating length units; and osing geometric shapes. umbers. They use a variety of methods, includin op meaning for the operations of addition and su erstand connections between counting and addit o add whole numbers and to create and use incr ubtraction problems within 20. By comparing a and subtraction. alized methods to add within 100 and subtract n e problems involving their relative sizes. They theres 11 to 19 as composed of a ten and some ones heir relative magnitudes. wes of measurement, including underlying concept principle for indirect measurement. d understanding of part-whole relationships as we from different perspectives and orientations, d ground for measurement and for initial understand	nes; g discrete ob ubtraction, and tion and subt easingly sop variety of sol multiples of f nink of whole s). Through a pts such as it well as the pr lescribe their andings of pr	jects, to model add-on, take nd to develop strategies to rraction (e.g., adding two is histicated strategies based lution strategies, children 10. They compare whole e numbers between 10 and activities that build number rerating (building up the roperties of the original and geometric attributes, and roperties such as congruence		

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TARGET STANDARDS							
I Can	Mathematic	al Practice Standard					
Count on to add.	MP.2. MP.7. N	1P.8					
Fluently add within 12	MP2 MP7 N	/P 8					
Use mental strategies to add within 12	MP.2, MP.7, MP.8						
Solve addition word problems within 12.	MP 1 MP 2 M	MP.1 MP.2 MP.3 MP.4 MP.5 MP.6 MP.8					
Figure out a missing number in an addition equation	MP 2 MP 6 M	/P 8					
Use strategies to make it easier to add and subtract.	MP.2. MP.7. N	11.0 1P.8					
IN	ISTRUCTIONA	L PROGRESSION					
	Go Math	Y II					
Loncept	Connection	Vocabulary					
Explore making parts for the sums of numbers to 12.	Topic 1 (1-1, 1-	In all, part, whole, double					
	2, 1-3, 1-4)						
Introduction to number sentences.	Begin with 1-5	Plus, add, sum, addition sentence, equals, join, order, addend					
Ten-frames and missing parts to 10.	Topic 3	Ten-frame, whole, missing part					
Addition Strategies	Tonic 4 (4-1 4-	Double near doubles counting on					
	2, 4-3, 4-4, 4-5)						
	· · · · ·						
	Additional	Resources					
Go Math's Basic-Facts Timed							
Tests Pearsonrealize.com							
http://tillikilinity.org							
Xtramath.org							
Special Notes:							
Use Topic Tests in Assessment Sourcebook at you	r discretion.						
Use at least 1 Performance Task in your instruction	on in Trimester	1.					

DIFFERENTIATION						
ELL	I&RS	ENRICH				
 Use Go Maths Spanish Resources Provide text to speech for math problems Use of translation dictionary or software Implement strategy groups Confer frequently Provide graphic organizers Modification plan NJDOE resources Adapt a Strategy-Adjusting strategies for ESL students: http://www.teachersfirst.com/con tent/esl/adaptstrat.cfm 	 Tiered Interventions following I&RS framework I&RS Intervention Bank NJDOE resources Math Lab Utilize online resources such as <u>www.tenmarks.com</u> Go Math k-5 intervention supports 	 Process should be modified: higher order thinking skills, open-ended thinking, discovery Utilize project-based learning for greater depth of knowledge Utilize exploratory connections to higher grade concepts Contents should be modified: abstraction, complexity, variety, organization Products should be modified: real world problems, audiences, deadlines, evaluation, transformations Learning environment should be modified: student-centered learning, independence, openness, complexity, groups varied Use of web based resources such as <u>www.tenmarks.com</u> Go Math extension activities <u>NJDOE resources</u> 				
CROSS CURRIC	CULUR RESOURCES					
adwritethink.org/search/?resource_ty	pe=6&q=math&sort_order=relevance					
<u>kineticcity.com/</u>						
ce: http://www.egfi-k12.org/						
ALIGNMENT TO 21 st CENT	URY SKILLS AND TECHNOLOGY					
emes: Bold all that apply	21 st Century Skills: Bold all that apply					
epreneurial Literacy	Creativity & Innovation Critical Thinking & Problem Solving Communication & Collaboration Media Literacy Information Literacy Information, Communication & Technology	Y				
	ELL Use Go Maths Spanish Resources Provide text to speech for math problems Use of translation dictionary or software Implement strategy groups Confer frequently Provide graphic organizers Modification plan NJDOE resources Adapt a Strategy-Adjusting strategies for ESL students: http://www.teachersfirst.com/con_tent/esl/adaptstrat.cfm CROSS CURRIC adwritethink.org/search/?resource_typ ineticcity.com/ ter: http://www.egfi-k12.org/ ALIGNMENT TO 21 st CENT remes: Bold all that apply epreneurial Literacy	DIFFERENTIATION ELL I&RS • Use Go Maths Spanish Resources • Tiered Interventions following I&RS framework • Use of translation dictionary or software • I&RS Intervention Bank • Implement strategy groups • Math Lab • Confer frequently • WIDOE resources • Modification plan • Utilize online resources such as www.tenmarks.com • Modification plan • Utilize online resources such as www.tenmarks.com • Modification glan strategies for ESL students: http://www.teachersfirst.com/con_ tent/esl/adaptstrat.cfm • Go Math k-5 intervention supports CROSS CURRICULUR RESOURCES adwritethink.org/search/?resource type=6&q=math&sort_order=relevance ineticcity.com/ re: http://www.egfi-k12.org/ 21 st Century Skills: Bold all that apply creativity & Innovation Critical Thinking & Problem Solving Communication & Collaboration Media Literacy Information Literacy Information Literacy				

Technology Infusion

National Library of Virtual Manipulatives http://nlvm.usu.edu/en/nav/vlibrary.html

Math Resources for Technology <u>https://drive.google.com/file/d/0B4Zh_BcwMUEMOFRfSXZpdW9Yams/view?usp=sharing</u>

Smart Board Applications

Go Math applications and online resources

Evidence of Student Learning

- Common benchmark
- Observation
- Evaluation rubrics
- Self-reflections
- Teacher-student conferences
- Running records
- Performance Tasks
- Unit tests
- Quizzes

CRP Standards

CRP1. Act as a responsible and contributing citizen and employee.

CRP2. Apply appropriate academic and technical skills.

CRP3. Attend to personal health and financial well-being.

CRP4. Communicate clearly and effectively and with reason.

CRP5. Consider the environmental, social and economic impacts of decisions.

CRP6. Demonstrate creativity and innovation.

CRP7. Employ valid and reliable research strategies.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP9. Model integrity, ethical leadership and effective management.

CRP10. Plan education and career paths aligned to personal goals.

CRP11. Use technology to enhance productivity.

Lebanon Borough Public School Instructional Unit							
Content:	Mathematics			Grade:	1		
Trimester:	1	Unit 3	Understanding Subtraction	Pacing:	4 weeks		
		CRITICAL A	REAS OF FOCUS FOR 1 st Grade				
 In grade 1, instructional time should focus on four critical areas: Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; Developing understanding of whole number relationships and place value, including grouping in tens and ones; Developing understanding of linear measurement and measuring lengths as iterating length units; and Reasoning about attributes of, and composing and decomposing geometric shapes. Students develop strategies for adding and subtracting whole numbers. They use a variety of methods, including discrete objects, to model add-on, take from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction (e.g., adding two is solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition and subtraction problems within 20. By comparing a variety of solution strategies, children build their understanding of the relationship between addition and subtraction. Students develop, discuss, and use efficient, accurate, and generalized methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones). Through activities that build number sense, they understanding of the meaning and processes of measurement, including underlying concepts such as iterating (building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement. 							
ESSENTIAL QUESTION							
What does it m	iean to subtract?						

TARGET STANDARDS

Mathemati	CS					
Math NJSL S	I Can	Mathematic	al Practice Standard	Benchmar Assessmer (Place an X or N/A)		
1.0A.C.5	Count back to subtract.	MP.2, MP.7, N	MP.8	N/A		
1.0A.C.6	Use mental strategies to subtract within 12.	MP.2, MP.7, N	MP.8	N/A		
1.0A.A.1	Solve subtraction word problems within 12.	MP.1, MP.2, N	MP.3, MP. 4, MP.5, MP.6, MP.8	Х		
1.0A.B.4	1.OA.B.4Use addition facts to solve subtraction problems.MP.2, MP.7, MP.8					
1.0A.B.3	Use strategies to make it easier to add and subtract.	MP.2, MP.7, N	MP.8	Х		
INSTRUCTIONAL PROGRESSION						
Weekly Plan	Concept	Go Math Connection	Vocabulary	Evidence of Learning		
During Week 8	Finding Missing Parts and Number Sentences	Topic 2 (2-1, 2- 2, 2-3, 2-4)	Missing part, whole, subtract, difference, subtraction sentence, minus sign, equal sign	Quick Check Masters; Exit Slips		
During Week 9	Subtraction Concepts	Topic 2 (2-5, 2- 6, 2-7)	Take away, compare, missing part, whole	Problem of the Day; Exit Slips		
During Week 10	Connecting Addition and Subtraction with different strategies	Topic 2-8, 2-9, 2-11, Topic Test	Same amount	Problem of the Day; Exit Slips		
During Week 11	Subtracting 0, 1, and 2; Connecting addition and subtraction	Topic 4-6, 4-7, 4-8, 4-9, 4-10	Less than	Quick Check Masters; Topic Test 4		
During Week 12	Reteach Week					
During Week 13	Reteach Week					
	Addition	al Resources				
Daily Commo Pearsonreali http://thinkf http://www.	n Core Review Pages ze.com inity.org kidport.com					

Special Notes:	Special Notes:						
Use Topic Tests in Assessment Sourcebook at your discretion.							
Use at least 1 Performance Task in your instruction in Trimester 1.							
DIFFERENTIATION Special Education ELL I&RS							
 Provide modifications & accommodations as listed in the student's IEP Position student near helping peer or have quick access to teacher Modify or reduce assignments/tests Reduce length of assignment for different mode of delivery Increase one-to-one time Utilize working contract between you and student at risk Prioritize tasks Provide manipulatives Use graphic organizers Use online resources for skill building Provide teacher notes Use collaborative grouping strategies such small groups Use Go Maths online resources NIDOE resources 	 Use Go Maths Spanish Resources Provide text to speech for math problems Use of translation dictionary or software Implement strategy groups Confer frequently Provide graphic organizers Modification plan NJDOE resources Adapt a Strategy-Adjusting strategies for ESL students: http://www.teachersfirst.com/con tent/esl/adaptstrat.cfm 	 Fiered Interventions following I&RS framework I&RS Intervention Bank NJDOE resources Math Lab Utilize online resources such as <u>www.tenmarks.com</u> Go Math k-5 intervention supports 	 Process should be modified: higher order thinking skills, open-ended thinking, discovery Utilize project-based learning for greater depth of knowledge Utilize exploratory connections to higher grade concepts Contents should be modified: abstraction, complexity, variety, organization Products should be modified: real world problems, audiences, deadlines, evaluation, transformations Learning environment should be modified: student-centered learning, independence, openness, complexity, groups varied Use of web based resources such as <u>www.tenmarks.com</u> Go Math extension activities <u>NJDOE resources</u> 				
	CROSS CURRICU						
Literacy in Mathematics: <u>http://www.re</u>	adwritetnink.org/search/?resource_type	=6&q=math&sort_order=relevance					
Grade 3-5 STEM resource: http://www.k	kineticcity.com/						
K-12 STEM Educator and Career Resource	ce: http://www.egfi-k12.org/						

ALIGNMENT TO 21 st CEN	TURY SKILLS AND TECHNOLOGY
21 st Century/ Interdisciplinary Themes: Bold all that apply	21 st Century Skills: Bold all that apply
Global Awareness	Creativity & Innovation
Financial, Economic, Business and Entrepreneurial Literacy	Critical Thinking & Problem Solving
Civic Literacy	Communication & Collaboration
Health Literacy	Media Literacy
Environmental Literacy	Information Literacy
	Information, Communication & Technology
Technology Infusion	
National Library of Virtual Manipulatives http://nlym.usu.edu/en/nav/ylibrary	/.html
Math Resources for Technology https://drive.google.com/file/d/0B4Zh_BcwN	//UEMOFRfSXZpdW9Yams/view?usp=sharing
Smart Board Applications	
Go Math applications and online resources	
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• Quizzes	
CRP Standards	
CRP1. Act as a responsible and contributing citizen and employee.	
CRP2. Apply appropriate academic and technical skills.	
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CRP6. Demonstrate creativity and innovation.	
CRP/. Employ Valid and reliable research strategies.	aluing them
CRPO. Utilize critical tranking to make sense of problems and persevere in so	nving them.
CRP10. Plan education and career native aligned to nersonal goals	
CRP11. Use technology to enhance productivity.	
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Lebanon Borough Public School Instructional Unit									
Content:	Mathematics			Grade:	1				
Trimester:	2	Unit 1	Subtraction within 20	Pacing:	5 weeks				
	CRITICAL AREAS OF FOCUS FOR 1st Grade								
In grade 1, instructional time should focus on four critical areas: 1. Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; 2. Developing understanding of whole number relationships and place value, including grouping in tens and ones; 3. Developing understanding of linear measurement and measuring lengths as iterating length units; and 4. Reasoning about attributes of, and composing and decomposing geometric shapes. 1. Students develop strategies for adding and subtracting whole numbers. They use a variety of methods, including discrete objects, to model add-on, take from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition and subtraction. 2. Students develop, discuss, and use efficient, accurate, and generalized methods to add whole numbers and to create and use increasingly sophisticated strategies based numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones). Through activities that build number sense, they understanding of the meaning and processes of measurement, including underlying concepts such as iterating (building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement. 3. Students develop an understanding of the meaning and processes o									
		ES	SSENTIAL QUESTION						
What other strategies can be used to find subtraction facts?									
		<u>T</u>	ARGET STANDARDS						
Math NJSLS	I Can		Mathematical Practice Standa	ard	Benchmark				

Mathematics				
				Assessment (Place an X or N/A)
1.0A.C.6	Use mental strategies to add and subtract within 20.	MP.2, MP.7, N	N/A	
1.0A.C.6	Fluently add and subtract within 10.	MP.2, MP.7, N	ИР.8	N/A
1.0A.A.1	Solve addition and subtraction word problems within 20.	MP.3, MP.4, MP.5, MP.6, MP.8	X	
1.0A .D.8	Figure out a missing number in an addition or subtraction equation.	MP.2, MP. 6, 1	MP.8	X
1.0A.B.3	Use strategies to make it easier to add and subtract.	MP.2, MP.7, N	MP.8	N/A
1.0A.B.4	Use addition facts to solve subtraction problems.	MP.2, MP.7, N	4P.8	Х
1.0A.A.2	Solve word problems by adding three numbers whose sum is less than or equal to 20.	MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	Х	
	INSTRUCTION	AL PROGRESS	SION	
Weekly Plan	Concept	Go Math Connection	Vocabulary	Evidence of Learning
D (U
During Week 1	Addition Strategies using Doubles	Topic 5 (5-1, 5- 2, 5-3)	Doubles, Doubles plus 1, Doubles plus two	Quick Check Masters
During Week 1 During Week 2	Addition Strategies using Doubles Making 10	Topic 5 (5-1, 5- 2, 5-3) Topic 5 (5-5, 5- 6, 5-7)	Doubles, Doubles plus 1, Doubles plus two	Quick Check Masters Teacher observations; Exit slips
During Week 1 During Week 2 During Week 3	Addition Strategies using Doubles Making 10 Adding three numbers	Topic 5 (5-1, 5- 2, 5-3) Topic 5 (5-5, 5- 6, 5-7) Topic 5 (5-8, 5- 9)	Doubles, Doubles plus 1, Doubles plus two	Quick Check Masters Teacher observations; Exit slips Problem of the Day; Topic 5 Test
During Week 1 During Week 2 During Week 3 During Week 4	Addition Strategies using Doubles Making 10 Adding three numbers Making 10 to subtract, Related facts, and Fact families	Topic 5 (5-1, 5- 2, 5-3) Topic 5 (5-5, 5- 6, 5-7) Topic 5 (5-8, 5- 9) Topic 6	Doubles, Doubles plus 1, Doubles plus two Related facts, fact family	Quick Check Masters Teacher observations; Exit slips Problem of the Day; Topic 5 Test Fact Triangles, Exit slips, Quick Check Masters

Additional Resources Go Math Basic-Facts Timed Tests Carson-Dellosa Center-SOLUTIONS for the Common Core Task Cards **Daily Common Core Review Pages** pearsonrealize.com http://thinkfinity.org http://www.kidport.com Xtramath.org **Special Notes:** Use Topic Tests in Assessment Sourcebook at your discretion. Use at least 1 Performance Task in your instruction or as an assessment in Trimester 2. DIFFERENTIATION **Special Education** ELL I&RS ENRICH • Tiered Interventions following • Provide modifications & Use Go Maths Spanish Resources • Process should be modified: higher **I&RS** framework accommodations as listed in the • Provide text to speech for math order thinking skills, open-ended student's IEP thinking, discovery problems I&RS Intervention Bank Position student near helping peer • Use of translation dictionary or • NJDOE resources • Utilize project-based learning for or have quick access to teacher greater depth of knowledge software Math Lab Modify or reduce assignments/tests Utilize exploratory connections to Utilize online resources such as • Implement strategy groups • Reduce length of assignment for • Confer frequently www.tenmarks.com higher grade concepts different mode of delivery • Contents should be modified: Provide graphic organizers • Go Math k-5 intervention supports ٠ abstraction, complexity, variety, Increase one-to-one time ٠ Modification plan • Utilize working contract between organization NJDOE resources ٠ • Products should be modified: real you and student at risk Adapt a Strategy-Adjusting • world problems, audiences, Prioritize tasks strategies for ESL students: deadlines, evaluation, • Provide manipulatives http://www.teachersfirst.com/con tent/esl/adaptstrat.cfm transformations • Use graphic organizers • Learning environment should be • Use interactive math journals modified: student-centered • Use online resources for skill learning, independence, openness, building complexity, groups varied • Provide teacher notes • Use of web based resources such • Use collaborative grouping as www.tenmarks.com strategies such small groups Go Math extension activities Use Go Maths online resources NJDOE resources NJDOE resources

CROSS CURRICULUR RESOURCES				
Literacy in Mathematics: http://www.readwritethink.org/search/?resource	type=6&q=math&sort_order=relevance_			
Grade 3-5 STEM resource: http://www.kineticcity.com/				
K-12 STEM Educator and Career Resource: <u>http://www.egfi-k12.org/</u>				
ALIGNMENT TO 21 st CENTURY SKILLS AND TECHNOLOGY				
21 st Century/ Interdisciplinary Themes: Bold all that apply	21 st Century Skills: Bold all that apply			
Global Awareness	Creativity & Innovation			
Financial, Economic, Business and Entrepreneurial Literacy	Critical Thinking & Problem Solving			
Civic Literacy	Communication & Collaboration			
Health Literacy	Media Literacy			
Environmental Literacy	Information Literacy			
	Information, Communication & Technology			
	Life & Career Skills			
Technology Infusion				
National Library of Virtual Manipulatives <u>http://nlvm.usu.edu/en/nav/vlibrar</u>	<u>y.html</u>			
Math Resources for Technology <u>https://drive.google.com/file/d/0B4Zh_Bcw</u>	MUEMOFRfSXZpdW9Yams/view?usp=sharing			
Smart Board Applications				
Go Math applications and online resources				
Evidence of Student Learning				
Common benchmark				
Observation				
Evaluation rubrics				
Self-reflections				
Teacher-student conferences				
Running records				
Performance Tasks				
Unit tests				
Quizzes				

CRP Standards

CRP1. Act as a responsible and contributing citizen and employee.

CRP2. Apply appropriate academic and technical skills.

CRP3. Attend to personal health and financial well-being.

CRP4. Communicate clearly and effectively and with reason.

CRP5. Consider the environmental, social and economic impacts of decisions.

CRP6. Demonstrate creativity and innovation.

CRP7. Employ valid and reliable research strategies.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP9. Model integrity, ethical leadership and effective management.

CRP10. Plan education and career paths aligned to personal goals.

CRP11. Use technology to enhance productivity.

Lebanon Borough Public School Instructional Unit							
Content:	Mathematics			Grade:	1		
Trimester:	2	Unit 2	Number and Operations in Base Ten	Pacing:	9 Weeks		
		CRITICAL A	REAS OF FOCUS FOR 1 st Grade				
In grade 1, instructional time should focus on four critical areas: 1. Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; 2. Developing understanding of linear measurement and measuring lengths as iterating length units; and 4. Reasoning about attributes of, and composing and decomposing geometric shapes. 1. Students develop strategies for adding and subtracting whole numbers. They use a variety of methods, including discrete objects, to model add-on, take from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition to add whole numbers and to create and use increasingly sophisticated strategies based on these properties (e.g., "making tens") to solve addition and subtraction. 2. Students develop, discuss, and use efficient, accurate, and generalized methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers and their relative magnitudes. 3. Students develop an understanding of the meaning and processes of measurement, including underlying concepts such as iterating (building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement. 4. Students compose and decompose plane or solid figures to build understanding of part-whole relationships as well as the properties of the original and composite shapes. As they combine shapes, they recognize them from different perspectives and orientations, describe their geometric surplus, and determine how they are alike and different, to develop to background of part-whole relationships as well as the properties of the original and composite shapes. As they combine shapes, they recognize them from different							
		E	SSENTIAL QUESTION				
What number patterns are there when counting to 120? How can numbers 10 and higher be shown, counted, read, and written?							
TARGET STANDARDS							

Mathematio	CS					
Math NJSLS	I Can	Mathematic	Benchmark Assessment (Place an X or N/A)			
1.NBT. B.2	Understand that two-digit numbers contain tens and ones.	MP.1, MP.4, I	MP.5		Х	
1.NBT.B.2a	Know that 10 is ten ones, or a ten.	MP.1, MP.2, MP.5				
1.NBT.B.2b	Know that the numbers 11-19 have a ten and some ones.				X	
1.NBT.B.2c	Tell how many tens and ones are the multiples of ten.	MP.1, MP.3, I	MP.7		Х	
1.NBT.C.5	Explain how to find ten more or 10 less than a two digit number.	MP.1, MP.2, I	MP.6		X	
1.NBT.C.4	Add a 2-digit number to a 1-digit or 2-digit numberMP.1, MP.5, MP.6, MP.7(multiple of 10) within 100.				Х	
1.NBT.B3	Compare two 2-digit numbers.	MP.2, MP.3,	MP.5, MP.8		Х	
1.NBT.C.6	6 Explain how to subtract multiples of 10 from other multiples of 10 up to 90. MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8				N/A	
	INSTRUCTION	AL PROGRESS	SION			
Weekly Plan	Concept	Go Math Connection	Vocabulary	Evidence of Learning		
During Week 6	Counting and Number Patterns to 120	7-1, 7-2, 7-3, 7-4, 7-6		Quick Cheo Number Gr Teacher ob	ck Masters, rid Puzzles, servation	
During Week 7	Place Value, Tens and Ones	8-1, 8-2, 8-3	Tens, ones, digit	Quick Chec Teacher ob	k Masters, servation	
During Week 8	Place Value, Tens and Ones	8-4, 8-5	Break apart a ten	Quick Chec Exit slips; 7	k Masters; Fopic 8 Test	
During Week 9	Comparing Numbers to 100	9-1, 9-2, 9-3, 9-4	1 more, 1 less, 10 more, 10 less, greater than (>), less than (<), equal to (=)Exit slips; the day		Problem of	
During Week 10	Comparing Numbers to 100, Problem Solving	9-5	Quick Ch Topic 9 T the Day		Masters; ; Problem of	
During Week 11	Adding with Tens and Ones	10-1, 10-2, 10-3, 10-4, 10-5	Regroup	Quick Check Mast Problem of the da Slips		
During Week 12	Adding with Tens and Ones	10-5, 10-6	Regroup	Quick Check Exit slips; Pr the Day		

During Week 13	Subtracting with Tens and Ones 11 1 1 1 1 T T		11-1 11-1 11-1 Test	1, 11-2, 3, 11-4, 5, Topic t		Quick Check Masters; Topic 11 Test; Exit Slips		
Additional Resources								
Base-10 Blocks Number Grid Puzzles Carson-Dellosa Center-SOLUTIONS for the Common Core Task Cards Daily Common Core Review Pages pearsonrealize.com http://thinkfinity.org http://www.kidport.com								
Special No	tes:							
Use Topic Tes	sts in Assessment Source	boo	ok at your discretion.					
Use at least 1	Performance Task in you	ir ir	nstruction or as an assessment in Tr	ime	ester 2.			
	tal Education		DIFFEREI					
Spec	cial Education		ELL		I&RS	<u> </u>	ENRICH	
Provide mo	difications &	•	Use Go Maths Spanish Resources	•	Tiered Interventions following	•	Process should be modified: higher	
accommoda	ations as listed in the	•	Provide text to speech for math		I&RS framework		order thinking skills, open-ended	
student's IE	P		problems	•	I&RS Intervention Bank		thinking, discovery	
 Position stu 	dent near helping peer	•	Use of translation dictionary or	•	NJDOE resources	•	Utilize project-based learning for	
or have quid	ck access to teacher		software	•	Math Lab		greater depth of knowledge	
Modify or re	educe assignments/tests	•	Implement strategy groups	•	Utilize online resources such as	•	Utilize exploratory connections to	
Reduce leng	gth of assignment for	•	Confer frequently		www.tenmarks.com		nigner grade concepts	
different mo	ode of delivery	•	Provide graphic organizers	•	Go Math k-5 intervention supports	•	contents should be modified:	
 Increase on 	e-to-one time	•	Modification plan				abstraction, complexity, variety,	
 Utilize work 	ling contract between	•	NJDOE resources				Draducts should be madified: real	
you and stu		•	Adapt a Strategy-Adjusting			•	world problems, audiences	
 Prioritize tas Provido mar 	SKS		strategies for ESL students:				deadlines evaluation	
 Provide mail Use graphic 	organizors		topt/osl/adaptstrat.cfm				transformations	
 Use graphic Use interact 	tive math journals					•	Learning environment should be	
 Use interact Use online r 	cosourcos for skill						modified: student-centered	
 Use online i building 	esources for skill						learning, independence, openness,	
 Brovide teau 	charnotas						complexity, groups varied	
Use collabo	rative grouning					•	Use of web based resources such	
strategies s	uch small groups						as <u>www.tenmarks.com</u>	
 Use Go Mat 	ths online resources					•	Go Math extension activities	
<u>NJDOE reso</u>	urces					•	NJDOE resources	

CROSS CURRICULUR RESOURCES					
Literacy in Mathematics: http://www.readwritethink.org/search/?resource	Literacy in Mathematics: http://www.readwritethink.org/search/?resource_type=6&g=math&sort_order=relevance_				
Grade 3-5 STEM resource: http://www.kineticcity.com/					
K-12 STEM Educator and Career Resource: <u>http://www.egfi-k12.org/</u>					
ALIGNMENT TO 21 st CENTURY SKILLS AND TECHNOLOGY					
21 st Century/ Interdisciplinary Themes: Bold all that apply 21 st Century Skills: Bold all that apply					
Global Awareness	Creativity & Innovation				
Financial, Economic, Business and Entrepreneurial Literacy	Critical Thinking & Problem Solving				
Civic Literacy	Communication & Collaboration				
Health Literacy	Media Literacy				
Environmental Literacy	Information Literacy				
	Information, Communication & Technology				
	Life & Career Skills				
Technology Infusion					
National Library of Virtual Manipulatives http://nlvm.usu.edu/en/nav/vlibrar	<u>y.html</u>				
Math Resources for Technology <u>https://drive.google.com/file/d/0B4Zh_Bcw</u>	MUEMOFRfSXZpdW9Yams/view?usp=sharing				
Smart Board Applications					
Go Math applications and online resources					
Evidence of Student Learning					
Common benchmark					
Observation					
Evaluation rubrics					
Self-reflections					
Teacher-student conferences					
Running records					
Performance Tasks					
Unit tests					
Quizzes					

CRP Standards

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CRP3. Attend to personal health and financial well-being.

CRP4. Communicate clearly and effectively and with reason.

CRP5. Consider the environmental, social and economic impacts of decisions.

CRP6. Demonstrate creativity and innovation.

CRP7. Employ valid and reliable research strategies.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP9. Model integrity, ethical leadership and effective management.

CRP10. Plan education and career paths aligned to personal goals.

CRP11. Use technology to enhance productivity.

Lebanon Borough Public School Instructional Unit							
Content:	Mathematics			Grade:	1		
Trimester:	3	Unit 1	Measurement by Length	Pacing:	1 week		
		CRITICAL A	REAS OF FOCUS FOR 1 st Grade				
In grade 1, instructional time should focus on four critical areas: 1. Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; 2. Developing understanding of whole number relationships and place value, including grouping in tens and ones; 3. Developing understanding of linear measurement and measuring lengths as iterating length units; and 4. Reasoning about attributes of, and composing and decomposing geometric shapes. 1. Students develop strategies for adding and subtracting whole numbers. They use a variety of methods, including discrete objects, to model add-on, take from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition and subtraction. 2. Students develop, discuss, and use efficient, accurate, and generalized methods to add whole numbers and to create and use increasingly sophisticated strategies, children build their understanding of the relationship between addition and subtraction. 2. Students develop, discuss, and use efficient, accurate, and generalized methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones). Through activities that build number sense, they understanding of the meaning and processes of measurement, including underlying concepts such as iterating (building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement. 4. Students compose and decompose plane or solid figures to build understanding of part-whole relation							
How can object	s he measured compared and or	dered by length?	SSEN HAL QUESTION				
How can objects be measured, compared, and ordered by length?							
		Т	ARGET STANDARDS				
Math	Can		Mathematical Practice Standa	ard	Benchmark		

Mathemati	CS				
NJSLS				Assessment (Place an X or N/A)	
1.MD.A.1	Use one object to compare the lengths of two other objects.	MP.1, MP.2, I	MP.3, MP.5, MP.6	X	
1.MD.A.1	Put objects in order by length.	MP.1, MP.2, I	MP.3, MP.5, MP.6	Х	
1.MD.A.2	Measure objects with nonstandard units.	MP.2, MP.4, I	MP.5, MP.6, MP.7, MP.8	X	
	INSTRUCTION	IAL PROGRESS	SION		
Weekly Plan	Concept	Go Math Connection	Vocabulary	Evidence of Learning	
During Week 1	During Measure lengths indirectly and by iterating length units. Topic 12 Longest, shortest, taller, shorter, estimate, measure Quick of Master the Da observ				
	Addition	al Resources			
Carson-Dello Daily Commo pearsonrealiz http://thinkf http://www.k	sa Center-SOLUTIONS for the Common Core TaskCards on Core Review Pages ze.com inity.org cidport.com				
Special No	tes:				
Use Topic T Use at least	Fests in Assessment Sourcebook at your discretion. t 1 Performance Task as an assessment in Trimester	· 3.			

	DIFFER	ENTIATION	
Special Education	ELL	I&RS	ENRICH
 Special Education Provide modifications & accommodations as listed in the student's IEP Position student near helping peer or have quick access to teacher Modify or reduce assignments/tests Reduce length of assignment for different mode of delivery Increase one-to-one time Utilize working contract between you and student at risk Prioritize tasks Provide manipulatives Use graphic organizers Use online resources for skill building Provide teacher notes Use collaborative grouping strategies such small groups Use Go Maths online resources 	 Use Go Maths Spanish Resources Provide text to speech for math problems Use of translation dictionary or software Implement strategy groups Confer frequently Provide graphic organizers Modification plan NJDOE resources Adapt a Strategy-Adjusting strategies for ESL students: http://www.teachersfirst.com/con tent/esl/adaptstrat.cfm 	 Tiered Interventions following I&RS framework I&RS Intervention Bank NJDOE resources Math Lab Utilize online resources such as www.tenmarks.com Go Math k-5 intervention supports 	 Process should be modified: higher order thinking skills, open-ended thinking, discovery Utilize project-based learning for greater depth of knowledge Utilize exploratory connections to higher grade concepts Contents should be modified: abstraction, complexity, variety, organization Products should be modified: real world problems, audiences, deadlines, evaluation, transformations Learning environment should be modified: student-centered learning, independence, openness, complexity, groups varied Use of web based resources such as <u>www.tenmarks.com</u> Go Math extension activities
• <u>NJDOE Tesources</u>			
Literacy in Mathematics: <u>http://www.re</u> Grade 3-5 STEM resource: <u>http://www.k</u> K-12 STEM Educator and Career Resource	adwritethink.org/search/?resource_ty kineticcity.com/ ce: http://www.egfi-k12.org/	pe=6&q=math&sort_order=relevance	
21 st Century/Interdisciplinary Th	ALIGNIVIENT TO ZI CENT	21 st Century Skills: Bold all that apply	
Global Awareness Financial, Economic, Business and Entre Civic Literacy Health Literacy Environmental Literacy	epreneurial Literacy	Creativity & Innovation Critical Thinking & Problem Solving Communication & Collaboration Media Literacy Information Literacy Information, Communication & Technolog Life & Career Skills	Y

Technology Infusion

National Library of Virtual Manipulatives http://nlvm.usu.edu/en/nav/vlibrary.html

Math Resources for Technology https://drive.google.com/file/d/0B4Zh BcwMUEMOFRfSXZpdW9Yams/view?usp=sharing

Smart Board Applications

Go Math applications and online resources

Evidence of Student Learning

- Common benchmark
- Observation
- Evaluation rubrics
- Self-reflections
- Teacher-student conferences
- Running records
- Performance Tasks
- Unit tests
- Quizzes

CRP Standards

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CRP10. Plan education and career paths aligned to personal goals.

CRP11. Use technology to enhance productivity.

Lebanon Borough Public School Instructional Unit							
Content:	Mathematics				Grade:	1	
Trimester:	3	Unit 2	Time		Pacing:	1 Week	
		CRITICAL A	REAS OF F	OCUS FOR 1 st Grade			
In grade 1, inst 1. Develop 2. Develop 3. Develop 4. Reasoni 1. Students dev from, put-tog solve arithm the same as on these pro build their u 2. Students dev numbers (at 100 in terms sense, they u 3. Students dev length of an 4. Students cor composite sl determine hy and symmet	 In grade 1, instructional time should focus on four critical areas: Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; Developing understanding of whole number relationships and place value, including grouping in tens and ones; Developing understanding of linear measurement and measuring lengths as iterating length units; and Reasoning about attributes of, and composing and decomposing geometric shapes. Students develop strategies for adding and subtracting whole numbers. They use a variety of methods, including discrete objects, to model add-on, take from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition and subtraction. Students develop, discuss, and use efficient, accurate, and generalized methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 1 to 19 as composed of a ten and some ones). Through activities that build number sense, they understand the order of the counting numbers and their relative magnitudes. Students develop an understanding of the meaning and processes of measurement, including underlying concepts such as iterating (building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement. Students develop an understanding of the evelops to build understanding of part-whole relationships as well as the properties of the original and composite shapes. As they co						
ESSENTIAL QUESTION							
How can clocks and schedules be read and used?							
TARGET STANDARDS							
Math NJSLS	I Can			Mathematical Practice Stand	ard		Benchmark Assessment (Place an X or N/A)
1.MD.B.3	Tell and write time to the hou	ir and half hour.		MP.1, MP.2, MP.3, MP.4, MP.5,	MP.6, MP.7,	MP.8	Х
1.MD.B.3	Tell and write time using ana	log and digital c	locks.	MP.1, MP.2, MP.3, MP.4, MP.5, I	MP.6, MP.7, 1	MP.8	Х

INSTRUCTIONAL PROGRESSION							
Weekly Plan	Concept	Go Math Connection	Vocabulary	Evidence of Learning			
During Week 2	Telling time using analog and digital clocks, to the hour and half hour.	Topic 13	Hour hand, hour, minute hand, minute, o'clock, half hour, schedule, analog clock, digital clock	Teacher observation; Quick Check Masters; Topic 13 Test			
	Addition	al Resources					
Student clocks, demonstration clock Carson-Dellosa Center-SOLUTIONS for the Common Core Task Cards Daily Common Core Review Pages pearsonrealize.com http://thinkfinity.org http://www.kidport.com							
Special Notes:							
Use Topic Tests in Assessment Sourcebook at your discretion.							
טאר מנוכמאנ דו כווטווומווכר דמאר מא מו מאדבאאוויוו דווווכאכו א.							

DIFFERENTIATION						
Special Education	ELL	I&RS	ENRICH			
 Special Education Provide modifications & accommodations as listed in the student's IEP Position student near helping peer or have quick access to teacher Modify or reduce assignments/tests Reduce length of assignment for different mode of delivery Increase one-to-one time Utilize working contract between you and student at risk Prioritize tasks Provide manipulatives Use graphic organizers Use online resources for skill building Provide teacher notes Use collaborative grouping strategies such small groups Use Go Maths online resources 	 Use Go Maths Spanish Resources Provide text to speech for math problems Use of translation dictionary or software Implement strategy groups Confer frequently Provide graphic organizers Modification plan NJDOE resources Adapt a Strategy-Adjusting strategies for ESL students: http://www.teachersfirst.com/con tent/esl/adaptstrat.cfm 	 Tiered Interventions following I&RS framework I&RS Intervention Bank NJDOE resources Math Lab Utilize online resources such as www.tenmarks.com Go Math k-5 intervention supports 	 Process should be modified: higher order thinking skills, open-ended thinking, discovery Utilize project-based learning for greater depth of knowledge Utilize exploratory connections to higher grade concepts Contents should be modified: abstraction, complexity, variety, organization Products should be modified: real world problems, audiences, deadlines, evaluation, transformations Learning environment should be modified: student-centered learning, independence, openness, complexity, groups varied Use of web based resources such as <u>www.tenmarks.com</u> MIDOE resources 			
<u>NJDOE resources</u>			• <u>NJDOE resources</u>			
CROSS CURRICULUR RESOURCES						
Literacy in Mathematics: <u>http://www.re</u>	adwritethink.org/search/?resource_ty	pe=6&q=math&sort order=relevance				
Grade 3-5 STEM resource: <a href="http://www.heightp:///www.heightp:///www.heightp://w</td> <td><u>kineticcity.com/</u></td> <td></td> <td></td>	<u>kineticcity.com/</u>					
K-12 STEW Educator and Career Resource: http://www.egti-k12.org/						
21 st Century/Interdisciplinary Themes: Bold all that apply 21 st Century Skills: Bold all that apply						
Global Awareness Financial, Economic, Business and Entre Civic Literacy Health Literacy Environmental Literacy	epreneurial Literacy	Creativity & Innovation Critical Thinking & Problem Solving Communication & Collaboration Media Literacy Information Literacy Information, Communication & Technolog Life & Career Skills	Ŷ			

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CRP10. Plan education and career paths aligned to personal goals.

CRP11. Use technology to enhance productivity.

Lebanon Borough Public School Instructional Unit								
Content:	Mathematics					Grade:	1	
Trimester:	3	Unit 3	Using Dat	a to Answer Questions		Pacing:	2 weeks	
		CRITICAL A	REAS OF	FOCUS FOR 1 st Grade	Ĵ			
In grade 1, instructional time should focus on four critical areas: 1. Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; 2. Developing understanding of whole number relationships and place value, including grouping in tens and ones; 3. Developing understanding of linear measurement and measuring lengths as iterating length units; and 4. Reasoning about attributes of, and composing and decomposing geometric shapes. 1. Students develop strategies for adding and subtracting whole numbers. They use a variety of methods, including discrete objects, to model add-on, take from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition and subtraction problems within 20. By comparing a variety of solution strategies, children build their understanding of the relationship between addition and subtraction. 2. Students develop, discuss, and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They understand the order of the counting numbers and their relative magnitudes. 3. Students develop an understanding of the meaning and processes of measurement, including underlying concepts such as iterating (building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement. 4. Students compose and decompose plane or solid figures to build understanding of part-whole relationships as well as the properties of the original and composite shapes. As they combine shapes, they recognize them from different perspectives and orientations, describe their geometric attributes,								
ESSENTIAL QUESTION								
How can graphs be used to show data and answer questions?								
TARGET STANDARDS								
Math NJSLS	I Can			Mathematical Practic	ce Standa	rd		Benchmark Assessment (Place an X or N/A)
1.MD.C.4	Organize data into three grou	ps or less.		MP.1, MP.2, MP.3, MP.4	4, MP.5, M	IP.6, MP.7		N/A
1.MD.C.4	Ask and answer questions ab	out data.		MP.1, MP.2, MP.3, MP.4	4, MP.5, M	P.6, MP.7		Х
INSTRUCTIONAL PROGRESSION								

Weekly Plan	Concept	Go Math Connection	Vocabulary	Evidence of Learning	
During Week 3	Represent and interpret data.	Topic	Picture graph, bar graph, tally	Teacher observation; Ouick Check Masters:	
WEEKJ		14-2,	mark, uata, graph	Problem of the Day	
		14-3,			
Durina	Represent and interpret data.	T4-4 Topic		Teacher observation:	
Week 4		14-5,		Quick Check Masters;	
		14-6,		Problem of the Day;	
	Addition	al Resources	<u> </u>	Topic 14 Test	
Additional Resources Post-it notes Graph paper Carson-Dellosa Center-SOLUTIONS for the Common Core Task Cards Daily Common Core Review Pages pearsonrealize.com http://thinkfinity.org http://www.kidport.com					
Special Notes:					
Use at least 1 Performance Task as an assessment in Trimester 3					

DIFFERENTIATION						
Special Education	ELL	I&RS	ENRICH			
 Provide modifications & accommodations as listed in the student's IEP Position student near helping peer or have quick access to teacher Modify or reduce assignments/tests Reduce length of assignment for different mode of delivery Increase one-to-one time Utilize working contract between you and student at risk Prioritize tasks Provide manipulatives Use graphic organizers Use online resources for skill building Provide teacher notes Use collaborative grouping strategies such small groups Use Go Maths online resources 	 Use Go Maths Spanish Resources Provide text to speech for math problems Use of translation dictionary or software Implement strategy groups Confer frequently Provide graphic organizers Modification plan NJDOE resources Adapt a Strategy-Adjusting strategies for ESL students: http://www.teachersfirst.com/con tent/esl/adaptstrat.cfm 	 Tiered Interventions following I&RS framework I&RS Intervention Bank NJDOE resources Math Lab Utilize online resources such as <u>www.tenmarks.com</u> Go Math k-5 intervention supports 	 Process should be modified: higher order thinking skills, open-ended thinking, discovery Utilize project-based learning for greater depth of knowledge Utilize exploratory connections to higher grade concepts Contents should be modified: abstraction, complexity, variety, organization Products should be modified: real world problems, audiences, deadlines, evaluation, transformations Learning environment should be modified: student-centered learning, independence, openness, complexity, groups varied Use of web based resources such as <u>www.tenmarks.com</u> Go Math extension activities NJDOE resources 			
	CROSS CURRI	CULUR RESOURCES				
Literacy in Mathematics: http://www.readwritethink.org/search/?resource_type=6&q=math&sort_order=relevance Grade 3-5 STEM resource: http://www.kineticcity.com/ K-12 STEM Educator and Career Resource: http://www.egfi-k12.org/						
ALIGNMENT TO 21 st CENTURY SKILLS AND TECHNOLOGY						
21 st Century/ Interdisciplinary Th	IEMES: Bold all that apply	21 ^{°°} Century Skills: Bold all that apply				
Global Awareness Financial, Economic, Business and Entre Civic Literacy Health Literacy Environmental Literacy	epreneurial Literacy	Critical Thinking & Problem Solving Communication & Collaboration Media Literacy Information Literacy Information, Communication & Technology Life & Career Skills				

Technology Infusion

National Library of Virtual Manipulatives http://nlvm.usu.edu/en/nav/vlibrary.html

Math Resources for Technology https://drive.google.com/file/d/0B4Zh BcwMUEMOFRfSXZpdW9Yams/view?usp=sharing

Smart Board Applications

Go Math applications and online resources

Evidence of Student Learning

- Common benchmark
- Observation
- Evaluation rubrics
- Self-reflections
- Teacher-student conferences
- Running records
- Performance Tasks
- Unit tests
- Quizzes

CRP Standards

CRP1. Act as a responsible and contributing citizen and employee.

CRP2. Apply appropriate academic and technical skills.

- CRP3. Attend to personal health and financial well-being.
- CRP4. Communicate clearly and effectively and with reason.
- CRP5. Consider the environmental, social and economic impacts of decisions.
- CRP6. Demonstrate creativity and innovation.
- CRP7. Employ valid and reliable research strategies.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP9. Model integrity, ethical leadership and effective management.

CRP10. Plan education and career paths aligned to personal goals.

CRP11. Use technology to enhance productivity.