

Pine Hill Public Schools Curriculum

Content Area:	Mathematics		
Course Title/ Grade Level:	First Grade (enVisions Program)		
Unit 1:	Understanding Addition	Month:	September
Unit 2:	Understanding Subtraction	Month:	September/October
Unit 3:	Five and Ten Relationships	Month:	October
Unit 4:	Addition and Subtraction Facts to 12	Month:	October/November
Unit 5:	Addition Facts to 20	Month:	November/December
Unit 6:	Subtraction Facts to 20	Month:	December
Unit 7:	Counting and Number Patterns To 120	Month:	January
Unit 8:	Tens and Ones	Month:	January
Unit 9:	Comparing and Ordering Numbers to 100	Month:	February
Unit 10:	Adding With Tens and Ones	Month:	February
Unit 11:	Subtracting With Tens and Ones	Month:	February/March
Unit 12:	Length	Month:	March
Unit 13:	Time	Month:	March
Unit 14:	Using Data to Answer Questions	Month:	March/April
Unit 15:	Geometry	Month:	April
Unit 16:	Counting Money	Month:	April/May
Date Created or Revised:	11/08/2011		
BOE Approval Date:			

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Understanding Addition		Unit #: 1
Course or Grade Level: 1 st Grade		Length of Time: 3 weeks, 1 day
Date Created: November 8, 2011		BOE Approval Date:
Pacing	Week #1: 4 days – benchmark assessment administration Week #2: Lessons 1.1 through 1.4 Week #3: Lessons 1.5 through 1.8, review Week #4: Test 9/24/12 2012-13 Dates: Sept. 6-Sept. 24	
Essential Questions	<ul style="list-style-type: none"> • What are ways to think about addition? 	
Content	<ul style="list-style-type: none"> • 1-1 Spatial Patterns for Numbers to 10 • 1-2 Making 6 and 7 • 1-3 Making 8 • 1-4 Making 9 • 1-5 Introducing Addition Expressions and Number Sentences • 1-6 Stories About Joining • 1-7 Adding in Any Order • 1-8 Problem Solving: Use Objects 	
Skills	<ul style="list-style-type: none"> • 1-1 Recognize Two-Part Spatial Patterns of Numbers • 1-2 Recognize Parts of a Number as a Strategy for Addition • 1-3 Recognize Parts of the Number 8 • 1-4 Recognize Parts of the Number 9 • 1-5 Write Addition Expressions and Number Sentences to Find the Whole, Given Two Parts • 1-6 Write Addition Sentences to Solve Stories about Joining • 1-7 To Add in Any Order • 1-8 Use Objects to Solve Story Problems 	
Assessments	<ul style="list-style-type: none"> • Anecdotal Records • Teacher Observations • Worksheet Pages • Topic Tests (Constructed Response, Multiple Choice) • Performance Tasks • Benchmark Tests at Beginning, Middle and End of Year 	
Interventions / differentiated instruction	<ul style="list-style-type: none"> • Reteach Masters • On-Level Masters • Enrichment Masters • Centers 	
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 	
Lesson resources / activities	<ul style="list-style-type: none"> • Pearson Website • SmartBoard • enVision Text • Manipulatives as Needed 	
Common Core State Standards		
Grade or Conceptual Category (HS only): First		
Domain (name and #): Operations and Algebraic Thinking		
Cluster: Represent and Solve Problems Involving Addition And Subtraction	1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., m by using objects, drawings, and equations with a symbol for the unknown number to represent a problem	
Cluster: Understand and Apply Properties of Operations and the Relationship Between Addition and Subtraction	1.OA.3 Apply properties of operations as strategies to add and subtract. <i>Examples:</i> If $8+3=11$ is known, then $3+8=11$ is also known. (Commutative property of addition.) To add $2+6+4$, the second two numbers can be added to make a ten, so $2+6+4=2+10=12$ (Associative property of addition)	

Cluster: Work with Addition and Subtraction Equations	1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <i>For example, which of the following equations are true and which are false?</i> $6=6$, $7=8-1$, $5+2=2+5$, $4+1=5+2$
	1.OA. 8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations</i> $8+?=11$, $5=?-3$, $6+6=?$

Math Practices:

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning

21st Century Themes

	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
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21st Century Skills

	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills		

Pine Hill Public Schools Mathematics Curriculum	
Unit Title:	Understanding Subtraction
Unit #:	2
Course or Grade Level: 1st Grade	Length of Time: 3 weeks
Date Created: November 8, 2011	BOE Approval Date:
Pacing	Week #1: Lessons 2.1 through 2.4 Week #2: Lessons 2.5 through 2.9 Week #3: Lessons 2.10 & 2.11, review and test 2012-13 Dates: Sept. 25 through Oct. 12
Essential Questions	<ul style="list-style-type: none"> • What are Ways to Think About Subtraction
Content	<ul style="list-style-type: none"> • 2-1 Finding Missing Parts of 6 and 7 • 2-2 Finding Missing Parts of 8 • 2-3 Finding Missing Parts of 9 • 2-4 Introducing Subtraction Expressions and Number Sentences • 2-5 Stories About Taking Away • 2-6 Stories About Comparing • 2-7 Stories About Missing Parts • 2-8 All Kinds of Subtraction Stories • 2-9 Connecting Addition and Subtraction • 2-10 Connecting Models and Symbols • 2-11 Problem Solving: Acted Out
Skills	<ul style="list-style-type: none"> • 2-1 Solve Problems by Finding the Missing Part • 2-2 Find a Missing Part of 8 When One Part is Known • 2-3 Use Subtraction to Find the Missing Part of 9 When One Part is Known • 2-4 Write and Solve Subtraction Number Sentences • 2-5 Tell and Act Out Stories About Taking Away to Find How Many are Left • 2-6 Tell and Act Out Comparing Stories to Find How Two Groups are Different • 2-7 Find the Missing Part When One Part and the Whole Are Given • 2-8 Write Subtraction Sentences to Represent Different Kinds of Subtraction Stories • 2-9 Write Related Addition and Subtraction Facts • 2-10 Write and Identify Different Subtraction Sentences that are True for the Same Model • 2-11 Use Counters to Act Out and Solve Subtraction Story Problems
Assessments	<ul style="list-style-type: none"> • Anecdotal Records • Teacher Observations • Worksheet Pages • Topic Tests (Constructed Response, Multiple Choice) • Performance Tasks • Benchmark Tests at Beginning, Middle and End of Year
Interventions / differentiated instruction	<ul style="list-style-type: none"> • Reteach Masters • On-Level Masters • Enrichment Masters • Centers
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving
Lesson resources / activities	<ul style="list-style-type: none"> • Pearson Website • SmartBoard • enVision Text • Manipulatives as Needed
Common Core State Standards	
Grade or Conceptual Category (HS only): First	
Domain (name and #): Operations and Algebraic Thinking	
Cluster:	#. Standard:
Represent and Solve Problems Involving Addition and Subtraction	1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., m by using objects, drawings, and equations with a symbol for the unknown number to represent a problem
Cluster:	1.OA.4 Understand subtraction as an unknown-addend problem. <i>For example, subtract 10-8 by finding the number that makes 10 when added to 8</i>
Understand and Apply Properties of Operations and the Relationship Between Addition and Subtraction	

Cluster: Add and Subtract within 20	1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on: making ten (e.g. $8+6=8+2+4=10+4=14$); decomposing a number leading to a ten (e.g., $13-4=13-3-1=10-1=9$); using the relationship between addition and subtraction (e.g., knowing that $8+4=12$, one knows $12-8=4$); and creating equivalent but easier or known sums (e.g., adding $6+7$ by creating the known equivalent $6+6+1=12+1=13$)					
Cluster: Work with Addition and Subtraction Equations	1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <i>For example, which of the following equations are true and which are false?</i> $6=6$, $7=8-1$, $5+2=2+5$, $4+1=5+2$ 1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations</i> $8+?=11$, $5=?-3$, $6+6=?$					
Math Practices: <ul style="list-style-type: none"> • Make sense of problems and persevere in solving them • Reason abstractly and quantitatively • Construct viable arguments and critique the reasoning of others • Model with mathematics • Use appropriate tools strategically • Attend to precision • Look for and make use of structure • Look for and express regularity in repeated reasoning 						
<u>21st Century Themes</u>						
	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy	Health Literacy
<u>21st Century Skills</u>						
	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration	Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills	

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Five and Ten Relationships		Unit #: 3
Course or Grade Level: 1 st Grade		Length of Time: 1 ½ Weeks
Date Created: November 8, 2011		BOE Approval Date:
Pacing	Week #1: Lessons 3.1 through 3.5 Week #2: Review and test 2012-13 Dates: Oct. 15 through Oct. 23	
Essential Questions	How can Numbers to 10 be Shown Using 5 and Some More	
Content	<ul style="list-style-type: none"> • 3-1 Representing Numbers on a Ten-Frame • 3-2 Recognizing Numbers on a Ten-Frame • 3-3 Parts of 10 • 3-4 Finding Missing Parts of 10 • 3-5 Problem Solving: Make a Table 	
Skills	<ul style="list-style-type: none"> • 3-1 Use Counters and a Ten-Frame to Model Numbers up to 10 • 3-2 Recognize Numbers on a Ten-Frame, Noting the Relationship of those Numbers to 5 and 10 • 3-3 Show 10 as Two Parts • 3-4 Use Counters Part-Part-Whole Mat to Find the Missing Parts of 10 • 3-5 Make Tables to Solve Problems 	
Assessments	<ul style="list-style-type: none"> • Anecdotal Records • Teacher Observations • Worksheet Pages • Topic Tests (Constructed Response, Multiple Choice) • Performance Tasks • Benchmark Tests at Beginning, Middle and End of Year 	
Interventions / differentiated instruction	<ul style="list-style-type: none"> • Reteach Masters • On-Level Masters • Enrichment Masters • Centers 	
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 	
Lesson resources / activities	<ul style="list-style-type: none"> • Pearson Website • SmartBoard • enVision Text • Manipulatives as Needed 	

Common Core State Standards

Grade or Conceptual Category (HS only): First

Domain (name and #): Operations and Algebraic Thinking

Cluster: Understand and Apply Properties of Operations and the Relationship Between Addition and Subtraction	#. Standard: 1.OA.4 Understand subtraction as an unknown-addend problem. <i>For example, subtract 10-8 by finding the number that makes 10 when added to 8</i>
Cluster: Add and Subtract within 20	1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2) 1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on: making ten (e.g., 8+6=8+2+4=10+4=14); decomposing a number leading to a ten (e.g., 13-4=13-3-1=10-1=9); using the relationship between addition and subtraction (e.g., knowing that 8+4=12, one knows 12-8=4); and creating equivalent but easier or known sums (e.g., adding 6+7 by creating the known equivalent 6+6+1=12+1=13)
Cluster: Work with Addition and Subtraction Equations	1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations 8+?=11, 5=?-3, 6+6=?</i>

Math Practices:

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning

21st Century Themes

	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
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21st Century Skills

	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills		

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Addition and Subtraction Facts to 12		Unit #: 4
Course or Grade Level: 1 st Grade		Length of Time: 3 ½ weeks
Date Created: November 8, 2011		BOE Approval Date:
Pacing	Week #1: Lessons 4.1 through 4.3 Week #2: Lessons 4.4 through 4.7 Week #3: Lessons 4.8 & 4.9 Week #4: Lesson 4.10, review and test 2012-13 Dates: Oct. 24 through Nov. 16	
Essential Questions	What Strategies Can be Used to Find Addition and Subtraction Facts.	
Content	<ul style="list-style-type: none"> • 4-1 Adding with 0,1,2 • 4-2 Doubles • 4-3 Near Doubles • 4-4 Facts with 5 on the Ten-Frame • 4-5 Making 10 on a Ten-Frame • 4-6 Subtracting with 0,1,2 • 4-7 Thinking Addition • 4-8 Thinking Addition to 8 to Subtract • 4-9 Thinking Addition to 12 to Subtract • 4-10 Problem Solving: Draw a Picture and Write a Number Sentence 	
Skills	<ul style="list-style-type: none"> • 4-1 Count on to Add, Starting with the Greater Number • 4-2 Recognize Doubles as a Strategy for Remembering Sums • 4-3 Use Doubles Facts to Learn Near Doubles Facts • 4-4 Use a Ten-Frame to Write Addition Facts with 5 • 4-5 Use Two Ten-Frames to Model Addition Facts • 4-6 Master Concepts of 0 Less Than, 1 Less Than, and 2 Less Than When Subtracting 0, 1, or 2 • 4-7 Use Doubles Addition Facts to Master Related Subtraction Facts • 4-8 Understand How Addition Facts to 8 Relate to Subtraction Facts to 8 • 4-9 Write Related Addition and Subtraction Facts to 12 • 4-10 Draw Pictures to Solve Addition Story Problems 	
Assessments	<ul style="list-style-type: none"> • Anecdotal Records • Teacher Observations • Worksheet Pages • Topic Tests (Constructed Response, Multiple Choice) • Performance Tasks • Benchmark Tests at Beginning, Middle and End of Year 	
Interventions / differentiated instruction	<ul style="list-style-type: none"> • Reteach Masters • On-Level Masters • Enrichment Masters • Centers 	
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 	
Lesson resources / activities	<ul style="list-style-type: none"> • Pearson Website • SmartBoard • enVision Text • Manipulatives as Needed 	
Common Core State Standards		
Grade or Conceptual Category (HS only): First		
Domain (name and #): Operations and Algebraic Thinking		
Cluster: Represent and Solve Problems Involving Addition and Subtraction	#. Standard:	
	1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., m by using objects, drawings, and equations with a symbol for the unknown number to represent a problem	
Cluster: Understand and Apply Properties of Operations and the Relationship Between Addition and Subtraction	1.OA.3 Apply properties of operations as strategies to add and subtract. <i>Examples: If $8+3=11$ is known, then $3+8=11$ is also known. (Commutative property of addition.) To add $2+6+4$, the second two numbers can be added to make a ten, so $2+6+4=2+10=12$ (Associative property of addition)</i>	
	1.OA.4 Understand subtraction as an unknown-addend problem. <i>For example, subtract $10-8$ by finding the number that makes 10 when added to 8</i>	

Cluster: Add and Subtract within 20	1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2) 1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on: making ten (e.g. $8+6=8+2+4=10+4=14$); decomposing a number leading to a ten (e.g., $13-4=13-3-1=10-1=9$); using the relationship between addition and subtraction (e.g., knowing that $8+4=12$, one knows $12-8=4$); and creating equivalent but easier or known sums (e.g., adding $6+7$ by creating the known equivalent $6+6+1=12+1=13$)
Cluster: Work with Addition and Subtraction Equations	1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <i>For example, which of the following equations are true and which are false? $6=6$, $7=8-1$, $5+2=2+5$, $4+1=5+2$</i> 1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8+?=11$, $5=?-3$, $6+6=?$</i>

Math Practices:

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning

[21st Century Themes](#)

	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
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[21st Century Skills](#)

	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills		

Pine Hill Public Schools Mathematics Curriculum	
Unit Title:	Addition Facts to 20
Unit #:	5
Course or Grade Level: 1 st Grade	Length of Time: 3 weeks
Date Created: November 8, 2011	BOE Approval Date:
Pacing	Week #1: Lessons 5.1 & 5.2 Week #2: Lessons 5.3 through 5.7 Week #3: Lessons 5.8 & 5.9, review and test 2012-13 Dates: Nov. 19 through Dec. 6
Essential Questions	What other strategies can be used to find addition facts?
Content	5-1 Doubles 5-2 Doubles Plus 1 5-3 Doubles Plus 2 5-4 Problem Solving: Two-Question Problems 5-5 Making 10 to Add 5-6 Making 10 to Add 9 5-7 Making 10 to Add 8 5-8 Adding Three Numbers 5-9 Word Problems With Three Addends
Skills	5-1 Recognize the Doubles Relationship and Use it as a Strategy for Remembering Addition Facts with Two Like Addends 5-2 Master Addition Facts where the Addends are 1 Apart 5-3 Master Addition Facts where the Addends are 2 Apart 5-4 Solve Two-Question Problems by Using the Answer to the First Question to Answer the Second Question 5-5 Master Addition Facts Where One Addend is Close to 10 5-6 Master Addition Facts Where One Addend is 9 5-7 Master Addition Facts Where One Addend is 8 5-8 Use the Associative and Commutative Properties to Add 3 Numbers 5-9 Solve Word Problems that Call For Addition of Three Whole Numbers Whose Sum is Less Than or Equal To 20
Assessments	<ul style="list-style-type: none"> • Anecdotal Records • Teacher Observations • Worksheet Pages • Topic Tests (Constructed Response, Multiple Choice) • Performance Tasks • Benchmark Tests at Beginning, Middle and End of Year
Interventions / differentiated instruction	<ul style="list-style-type: none"> • Reteach Masters • On-Level Masters • Enrichment Masters • Centers
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving
Lesson resources / activities	<ul style="list-style-type: none"> • Pearson Website • SmartBoard • enVision Text • Manipulatives as Needed
Common Core State Standards	
Grade or Conceptual Category (HS only): First	
Domain (name and #): Operations and Algebraic Thinking	
Cluster: Represent and Solve Problems Involving Addition and Subtraction	#. Standard: 1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., m by using objects, drawings, and equations with a symbol for the unknown number to represent a problem 1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
Cluster: Understand and Apply Properties of Operations and the Relationship Between Addition and Subtraction	1.OA.3 Apply properties of operations as strategies to add and subtract. Examples: If $8+3=11$ is known, then $3+8=11$ is also known. (Commutative property of addition.) To add $2+6+4$, the second two numbers can be added to make a ten, so $2+6+4=2+10=12$ (Associative property of addition)
Cluster:	1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction

Add and Subtract within 20	within 10. Use strategies such as counting on: making ten (e.g. $8+6=8+2+4=10+4=14$); decomposing a number leading to a ten (e.g., $13-4=13-3-1=10-1=9$); using the relationship between addition and subtraction (e.g., knowing that $8+4=12$, one knows $12-8=4$); and creating equivalent but easier or known sums (e.g., adding $6+7$ by creating the known equivalent $6+6+1=12+1=13$)					
Cluster: Work with Addition and Subtraction Equations	1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <i>For example, which of the following equations are true and which are false?</i> $6=6$, $7=8-1$, $5+2=2+5$, $4+1=5+2$ 1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations</i> $8+?=11$, $5=?-3$, $6+6=?$					
Math Practices: <ul style="list-style-type: none"> • Make sense of problems and persevere in solving them • Reason abstractly and quantitatively • Construct viable arguments and critique the reasoning of others • Model with mathematics • Use appropriate tools strategically • Attend to precision • Look for and make use of structure • Look for and express regularity in repeated reasoning 						
<u>21st Century Themes</u>						
	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy	Health Literacy
<u>21st Century Skills</u>						
	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration	Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills	

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Subtraction Facts to 20		Unit #: 6
Course or Grade Level: Math – 1st Grade		Length of Time: 3 weeks
Date Created: November 8th, 2011		BOE Approval Date:
Pacing	Week #1: Lesson 6.1 Week #2: Lessons 6.2 through 6.5 Week #3: Lessons 6.6 & 6.7, review and test 2012-13 Dates: Dec. 7 through Dec. 20	
Essential Questions	<ul style="list-style-type: none"> • What other strategies can be used to find subtraction facts. 	
Content	<ul style="list-style-type: none"> • 6-1 Subtraction: Making 10 to Subtract • 6-2 Subtraction: More with Making 10 to Subtract • 6-3 Subtraction: Using Related Facts • 6-4 Subtraction: Fact Families • 6-5 Subtraction: Using Addition to Subtract • 6-6 Subtraction: Subtraction Facts • 6-7 Problem Solving: Draw a Picture and Write a Number Sentence 	
Skills	<ul style="list-style-type: none"> • 6-1: Make Ten to Subtract • 6-2: Make Ten to Solve Subtraction Story Problems • 6-3: Find Subtraction Facts To Eighteen and Learn the Relationship Between Addition and Subtraction • 6-4: Use a Part/Part/Whole Model to Find the Subtraction Facts and Addition Facts In a Fact Family • 6-5: Use a Related Addition Fact to Find the Missing Part in a Subtraction Problem • 6-6: Use Related Addition Facts to Solve Subtraction Problems • 6-7: Draw Pictures and Write Number Sentences to Solve Addition and Subtraction Story Problems 	
Assessments	<ul style="list-style-type: none"> • Formative: Anecdotal Records, Teacher Observations, Worksheet Pages • Summative: Topic Tests (Constructed Response, Multiple Choice), Benchmark Tests at Beginning, Middle, and End of Year, Performance Task 	
Interventions / differentiated instruction	<ul style="list-style-type: none"> • Re-teach Masters • On-level Masters • Enrichment Masters • Centers • ELL Mini-Lessons 	
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 	
Lesson resources / activities	<ul style="list-style-type: none"> • Pearson Website • SmartBoard • enVision Text • Manipulatives (As Needed) 	
Common Core State Standards		
Grade or Conceptual Category (HS only):		
Domain (name and #): Operations and Algebraic Thinking (1.OA)		
Cluster: Represent and solve problems involving addition and subtraction.	1.OA.1 – Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	
Understand and apply properties of operations and the relationship between addition and subtraction.	1.OA.4 – Understand subtraction as an unknown-addend problem.	
Add and subtract within 20.	1.OA.6 – Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.	
Work with addition and subtraction equations.	1.OA.8 – Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.	
Math Practices:		
<ul style="list-style-type: none"> • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. 		

- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

21st Century Themes

	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
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21st Century Skills

	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills		

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Counting and Number Patterns To 120		Unit #: 7		
Course or Grade Level: Math – 1 st Grade		Length of Time: 2 weeks, 1 day		
Date Created: November 8 th , 2011		BOE Approval Date:		
Pacing	Week #1: Lesson 7.1 through 7.3 Week #2: Lessons 7.4, 7.5, A21(from EnVision Diagnosis and Intervention System), 7.6, review Week #3: Test 1/14/13 2012-13 Dates: Jan. 2 through Jan. 14			
Essential Questions	<ul style="list-style-type: none"> • What number patterns are there when counting to 120? 			
Content	<ul style="list-style-type: none"> • 7-1 Number: Making Numbers 11 to 19 • 7-2 Number: Using Numbers 11 to 19 • 7-3 Number: Counting by 10s to 120 • 7-4 Number: Counting on a Hundred Chart • 7-5 Number: Using Skip Counting • 7-6 Problem Solving: Look for a Pattern 			
Skills	<ul style="list-style-type: none"> • 7-1: Read, Count, and Write Numbers 11 to 19 • 7-2: Show Numbers 11 to 19 As One or Two More or Fewer Than Another Number • 7-3: Count Groups of Ten To Twelve 10s and Write How Many • 7-4: Count on a Hundred Chart • 7-5: Skip Count To Find The Total Number of Items Arranged In Sets Of 2s, 5s, and 10s • 7-6: Solve Problems By Finding Patterns in a Table of Related Number Pairs 			
Assessments	<ul style="list-style-type: none"> • Formative: Anecdotal Records, Teacher Observations, Worksheet Pages • Summative: Topic Tests (Constructed Response, Multiple Choice), Benchmark Tests at Beginning, Middle, and End of Year, Performance Task 			
Interventions / differentiated instruction	<ul style="list-style-type: none"> • Re-teach Masters • On-level Masters • Enrichment Masters • Centers • ELL Mini-Lessons 			
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 			
Lesson resources / activities	<ul style="list-style-type: none"> • Pearson Website • SmartBoard • enVision Text • Manipulatives (As Needed) 			
Common Core State Standards				
Grade or Conceptual Category (HS only): First				
Domain (name and #): Numbers and Operations in Base Ten (1.NBT)				
Extend the counting sequence.	1.NBT.1 – Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.			
Understand place value.	1.NBT.2.a – 10 can be thought of a bundle of ten ones – called a “ten”.			
	1.NBT.2.b – The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.			
	1.NBT.2.c – The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).			
Math Practices:				
<ul style="list-style-type: none"> • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. 				
<u>21st Century Themes</u>				
Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy	Civic Literacy	Health Literacy

21st Century Skills

	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills		

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Tens and Ones		Unit #: 8	
Course or Grade Level: Math – 1st Grade		Length of Time: 3 weeks	
Date Created: November 8th, 2011		BOE Approval Date:	
Pacing	Week #1: Lesson 8.1 through 8.4 Week #2: Lessons 8.5 & 8.6, review and test 2012-13 Dates: Jan. 15 through Jan. 25 Mid-year benchmark: 1/28/13 & 1/29/13		
Essential Questions	<ul style="list-style-type: none"> • How can numbers ten and higher be shown, counted, read, and written? 		
Content	<ul style="list-style-type: none"> • 8-1 Number: Counting with Groups of 10 and Leftovers • 8-2 Number: Numbers Made with Tens • 8-3 Number: Tens and Ones • 8-4 Number: Expanded Form • 8-5 Number: Ways to Make Numbers • 8-6 Problem Solving: Make an Organized List 		
Skills	<ul style="list-style-type: none"> • 8-1: Read and Write Two Digit Numbers As Groups of Ten and Some Left Over • 8-2: Count Groups of Ten, Up to Ten 10s, and Write How Many • 8-3: Use Groups of 10s and 1s To Show and Write A Given Two Digit Number • 8-4: Model A Two Digit Number and Write Its Expanded Form • 8-5: Break Apart A Ten To Make Ten 1s and Write New Representations In Expanded Form • 8-6: Use Groups of 10s and 1s To Show and Write A Given Two Digit Number 		
Assessments	<ul style="list-style-type: none"> • Formative: Anecdotal Records, Teacher Observations, Worksheet Pages • Summative: Topic Tests (Constructed Response, Multiple Choice), Benchmark Tests at Beginning, Middle, and End of Year, Performance Task 		
Interventions / differentiated instruction	<ul style="list-style-type: none"> • Re-teach Masters • On-level Masters • Enrichment Masters • Centers • ELL Mini-Lessons 		
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 		
Lesson resources / activities	<ul style="list-style-type: none"> • Pearson Website • SmartBoard • enVision Text • Manipulatives (As Needed) 		
Common Core State Standards			
Grade or Conceptual Category (HS only): First			
Domain (name and #): Number and Operations In Base Ten (1.NBT)			
Cluster: Understand place value.	1.NBT.2 – Understand that the two digits of a two-digit number represent amounts of tens and ones.		
	1.NBT.2.a – 10 can be thought of a bundle of ten ones – called a “ten”.		
	1.NBT.2.c – The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).		
Math Practices:			
<ul style="list-style-type: none"> • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. • Look for and make use of structure. • Look for and express regularity in repeated reasoning. 			
<u>21st Century Themes</u>			
Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy	Civic Literacy
			Health Literacy
<u>21st Century Skills</u>			
Creativity and Innovation	X	Critical Thinking and Problem Solving	Communication and Collaboration
			Information Literacy

	Media Literacy		ICT Literacy	X	Life and Career Skills
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**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Comparing and Ordering Numbers to 100		Unit #: 9
Course or Grade Level: Math – 1 st Grade		Length of Time: 2 weeks
Date Created: November 8 th , 2011		BOE Approval Date:
Pacing	Week #1: Lesson 9.1 through 9.3 Week #2: Lessons 9.4, 9.5, review and test 2012-13 Dates: Jan. 30 through Feb. 7	
Essential Questions	<ul style="list-style-type: none"> • How can numbers to 100 be compared and ordered? 	
Content	<ul style="list-style-type: none"> • 9-1 Number: 1 More, 1 Less; 10 More, 10 Less • 9-2 Number: Making Numbers on a Hundred Chart • 9-3 Number: Comparing Numbers with $>$, $<$, $=$ • 9-4 Number: Ordering Three Numbers • 9-5 Problem Solving: Make an Organized List 	
Skills	<ul style="list-style-type: none"> • 9-1: Write the Numbers That are One More or One Less and Ten More or Ten Less Than a Two Digit Number. • 9-2: Use a Hundred Chart to Show the Relationships of One More Than, One Less Than, Ten More Than, and Ten Less Than a Given Number. • 9-3: Compare Two Digit Numbers Using Symbols. • 9-4: Order Numbers From Least to Greatest, Given Three Two Digit Numbers • 9-5: Make an Organized List Showing Possible Solutions 	
Assessments	<ul style="list-style-type: none"> • Formative: Anecdotal Records, Teacher Observations, Worksheet Pages • Summative: Topic Tests (Constructed Response, Multiple Choice), Benchmark Tests at Beginning, Middle, and End of Year, Performance Task 	
Interventions / differentiated instruction	<ul style="list-style-type: none"> • Re-teach Masters • On-level Masters • Enrichment Masters • Centers • ELL Mini-Lessons 	
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 	
Lesson resources / activities	<ul style="list-style-type: none"> • Pearson Website • SmartBoard • enVision Text • Manipulatives (As Needed) 	
Common Core State Standards		
Grade or Conceptual Category (HS only): First		
Domain (name and #): Number and Operations In Base Ten (1.NBT)		
Cluster: Extend the counting sequence.	1.NBT.1 – Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	
Understand place value.	1.NBT.2 – Understand that the two digits of a two-digit number represent amounts of tens and ones.	
	1.NBT.3 – Compare two two-digit numbers based on meaning of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.	
Use place value understanding and properties of operations to add and subtract.	1.NBT.4 – Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	
	1.NBT.5 – Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	
Math Practices:		
<ul style="list-style-type: none"> • Make sense of problems and persevere in solving them. • Reason abstractly and quantitatively. • Construct viable arguments and critique the reasoning of others. • Model with mathematics. • Use appropriate tools strategically. • Attend to precision. 		

- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

21st Century Themes

	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
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21st Century Skills

	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills		

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Adding With Tens and Ones		Unit #: 10
Course or Grade Level: Math – 1 st Grade		Length of Time: 2 ½ weeks
Date Created: November 8 th , 2011		BOE Approval Date:
Pacing	Week #1: Lesson 10.1 Week #2: Lessons 10.2 through 10.5 Week #3: Lesson 10.6, review and test 2012-13 Dates: Feb. 8 through Feb. 21	
Essential Questions	<ul style="list-style-type: none"> • What are ways to add with tens and ones? 	
Content	<ul style="list-style-type: none"> • 10-1 Addition: Adding Groups of 10 • 10-2 Addition: Adding Tens on a Hundred Chart • 10-3 Addition: Adding Tens to Two-Digit Numbers • 10-4 Addition: Using Mental Math to Add Tens • 10-5 Addition: Adding to a Two-Digit Number • 10-6 Problem Solving: Draw a Picture and Write a Number Sentence 	
Skills	<ul style="list-style-type: none"> • 10-1: Add Two Multiples of Ten For Sums To One Hundred • 10-2: Use a Hundred Chart to Add Multiples of Ten to Two Digit Numbers • 10-3: Add a Multiple of Ten to a Two Digit Number • 10-4: Add Two Digit Numbers and Multiples of Ten Mentally • 10-5: Add One Digit Numbers to Two Digit Numbers With and Without Regrouping and Record the Sum In Horizontal Form. • 10-6: Solve Problems By Drawing Pictures and Writing Number Sentences. 	
Assessments	<ul style="list-style-type: none"> • Formative: Anecdotal Records, Teacher Observations, Worksheet Pages • Summative: Topic Tests (Constructed Response, Multiple Choice), Benchmark Tests at Beginning, Middle, and End of Year, Performance Task 	
Interventions / differentiated instruction	<ul style="list-style-type: none"> • Re-teach Masters • On-level Masters • Enrichment Masters • Centers • ELL Mini-Lessons 	
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 	
Lesson resources / activities	<ul style="list-style-type: none"> • Pearson Website • SmartBoard • enVision Text • Manipulatives (As Needed) 	

Common Core State Standards

Grade or Conceptual Category (HS only): First

Domain (name and #): Number and Operations in Base Ten (1.NBT)

Cluster: Use place value understanding and properties of operations to add and subtract.	1.NBT.4 – Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
	1.NBT.5 – Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

Math Practices:

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

[21st Century Themes](#)

Global Awareness	X	Financial, Economic,		Civic Literacy		Health Literacy
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			Business, and Entrepreneurial Literacy				
<u>21st Century Skills</u>							
	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills		

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Subtracting With Tens and Ones		Unit #: 11
Course or Grade Level: Math – 1st Grade		Length of Time: 2 ½ weeks
Date Created: November 8th, 2011		BOE Approval Date:
Pacing	Week #1: Lesson 11.1 Week #2: Lessons 11.2 through 11.6 Week #3: Review and test 2012-13 Dates: Feb. 22 through Mar. 5	
Essential Questions	<ul style="list-style-type: none"> • What are ways to subtract two digit numbers? 	
Content	<ul style="list-style-type: none"> • 11-1 Subtraction: Subtracting Groups of 10 • 11-2 Subtraction: Subtracting Tens of a Hundred Chart • 11-3 Subtraction: Subtracting Tens from Two-Digit Numbers • 11-4 Subtraction: Using Mental Math to Subtract Tens • 11-5 Subtraction: Subtracting from a Two-Digit Number • 11-6 Problem Solving: Draw a Picture and Write a Number Sentence 	
Skills	<ul style="list-style-type: none"> • 11-1: Subtract Ten From Multiples of Ten In The Range 10-90. • 11-2: Use a Hundred Chart to Subtract Multiples of Ten From Two-Digit Numbers. • 11-3: Subtract a Multiple of Ten From a Two-Digit Number. • 11-4: Subtract Multiples of Ten From Two-Digit Numbers Using Mental Math. • 11-5: Subtract One-Digit Numbers From Two-Digit Numbers With and Without Regrouping and Record the Difference in Horizontal Form. • 11-6: Draw a Picture and Write a Number Sentence To Solve Subtraction Story Problems. 	
Assessments	<ul style="list-style-type: none"> • Formative: Anecdotal Records, Teacher Observations, Worksheet Pages • Summative: Topic Tests (Constructed Response, Multiple Choice), Benchmark Tests at Beginning, Middle, and End of Year, Performance Task 	
Interventions / differentiated instruction	<ul style="list-style-type: none"> • Re-teach Masters • On-level Masters • Enrichment Masters • Centers • ELL Mini-Lessons 	
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 	
Lesson resources / activities	<ul style="list-style-type: none"> • Pearson Website • SmartBoard • enVision Text • Manipulatives (As Needed) 	

Common Core State Standards

Grade or Conceptual Category (HS only): First

Domain (name and #): Number and Operations in Base Ten (1.NBT)

Cluster: Use place value understanding and properties of operations to add and subtract.	1.NBT.5 – Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
	1.NBT.6 – Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Math Practices:

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

21st Century Themes

Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy	Civic Literacy	Health Literacy
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21st Century Skills

	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills		

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Length		Unit #: 12
Course or Grade Level: Math – 1st grade		Length of Time: 2 weeks
Date Created: November 8, 2011		BOE Approval Date:
Pacing	Week #1: Lessons 12.1 through 12.3 Week #2: Lessons 12.4 through 12.6, review and test 2012-13 Dates: Mar. 6 through Mar. 15	
Essential Questions	How can objects be measured, compared, and ordered by length?	
Content	<ul style="list-style-type: none"> ▪ Length comparison and ordering ▪ Indirect measurement ▪ Measurement of length and estimation of length with units ▪ More length measurements ▪ Problem Solving: Reasoning Strategy ▪ Measurement with different units 	
Skills	<ul style="list-style-type: none"> ▪ Compare and order lengths of objects ▪ Indirectly compare objects by length ▪ Estimate, measure, and compare lengths of objects by using a nonstandard unit ▪ Use connecting cubes as nonstandard units to measure and compare the lengths and heights of objects ▪ Use nonstandard units to measure the length of different objects ▪ Estimate and measure the lengths of objects in different units 	
Assessments	<ul style="list-style-type: none"> ▪ Formative : Lesson Quick Checks, Anecdotal records, Teacher Observation, Worksheet Pages ▪ Summative : Topic Tests (Multiple Choice and Constructed Response), Performance Task, Benchmark Tests at Beginning, Middle, and End of Year 	
Interventions / differentiated instruction	<ul style="list-style-type: none"> ▪ Re-teaching Masters ▪ On-level Masters ▪ Enrichment Masters ▪ Centers ▪ ELL Mini-lessons 	
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 	
Lesson resources / activities	<ul style="list-style-type: none"> ▪ Pearson website ▪ enVision text ▪ Smart boards ▪ Manipulatives (as needed) 	

Common Core State Standards

Grade or Conceptual Category (HS only): First

Domain (name and #): Measurement and Data (1.MD)

Cluster: Measure lengths indirectly	1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.
	1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <i>Limit to contexts where the objects being measured is spanned by a whole number of length units with no gaps or overlaps.</i>

Math Practices:

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

21st Century Themes

Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
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21st Century Skills

Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
Media Literacy		ICT Literacy	X	Life and Career Skills		

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Time		Unit #: 13	
Course or Grade Level: Math – 1st grade		Length of Time: 1 week, 1 day	
Date Created: November 8, 2011		BOE Approval Date:	
Pacing	Week #1: Lessons 13.1 through 13.4, review Week #2: Test 3/25/13 2012-13 Dates: Mar. 18 through Mar. 25		
Essential Questions	How can clocks and schedules be read and used?		
Content	<ul style="list-style-type: none"> ▪ Time: Understanding the hour and minute hands ▪ Time: Telling and writing time to the hour ▪ Time: Telling and writing time to the half hour ▪ Problem Solving: Use data from a table 		
Skills	<ul style="list-style-type: none"> ▪ Identify the hour and minute hands on a clock and tell time to the hour ▪ Tell and write time to the hour using digital and analog clocks ▪ Show and tell time to the half hour ▪ Read and use a schedule 		
Assessments	<ul style="list-style-type: none"> ▪ Formative : Lesson Quick Checks, Anecdotal records, Teacher Observation, Worksheet Pages ▪ Summative : Topic Tests (Multiple Choice and Constructed Response), Performance Task, Benchmark Tests at Beginning, Middle, and End of Year 		
Interventions / differentiated instruction	<ul style="list-style-type: none"> ▪ Re-teaching Masters ▪ On-level Masters ▪ Enrichment Masters ▪ Centers ▪ ELL Mini-lessons 		
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 		
Lesson resources / activities	<ul style="list-style-type: none"> ▪ Pearson website ▪ enVision text ▪ Smart boards ▪ Manipulatives (as needed) 		
Common Core State Standards			
Grade or Conceptual Category (HS only): First			
Domain (name and #): Measurement and Data (1.MD)			
Cluster: Tell and write time	1.MD.3 Tell and write time in hours and half hours using analog and digital clocks		
Math Practices:			
<ul style="list-style-type: none"> ▪ Make sense of problems and persevere in solving them. ▪ Reason abstractly and quantitatively. ▪ Construct viable arguments and critique the reasoning of others. ▪ Model with mathematics. ▪ Use appropriate tools strategically. ▪ Attend to precision. ▪ Look for and make use of structure. ▪ Look for and express regularity in repeated reasoning. 			
<u>21st Century Themes</u>			
Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy	Civic Literacy
			Health Literacy
<u>21st Century Skills</u>			
Creativity and Innovation	X	Critical Thinking and Problem Solving	Communication and Collaboration
			Information Literacy
Media Literacy		ICT Literacy	Life and Career Skills

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Using Data to Answer Questions		Unit #: 14	
Course or Grade Level: Math – 1st grade		Length of Time: 2 weeks, 1 day	
Date Created: November 8, 2011		BOE Approval Date:	
Pacing	Week #1: Lessons 14.1 through 14.3 Week #2: Lessons 14.4 through 14.7, review Week #3: Test 4/15/13 2012-13 Dates: Mar. 26 through Apr. 15		
Essential Questions	How can graphs be used to show data and answer questions?		
Content	<ul style="list-style-type: none"> ▪ Data: Using data from real graphs ▪ Data: Using data from picture graphs ▪ Data: Using data from bar graphs ▪ Data: Collecting data using tally marks ▪ Data: Making real graphs ▪ Data: Making picture graphs ▪ Problem Solving: Make a graph 		
Skills	<ul style="list-style-type: none"> ▪ Use a real object graph, a picture graph, and a bar graph to answer questions and draw conclusions. ▪ Record data using tally marks. ▪ Collect a set of data and organize it in a real graph. ▪ Organize and analyze data using a picture graph. ▪ Use data in a table to complete a bar graph. 		
Assessments	<ul style="list-style-type: none"> ▪ Formative : Lesson Quick Checks, Anecdotal records, Teacher Observation, Worksheet Pages ▪ Summative : Topic Tests (Multiple Choice and Constructed Response), Performance Task, Benchmark Tests at Beginning, Middle, and End of Year 		
Interventions / differentiated instruction	<ul style="list-style-type: none"> ▪ Re-teaching Masters ▪ On-level Masters ▪ Enrichment Masters ▪ Centers ▪ ELL Mini-lessons 		
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 		
Lesson resources / activities	<ul style="list-style-type: none"> ▪ Pearson website ▪ enVision text ▪ Smart boards ▪ Manipulatives (as needed) 		
Common Core State Standards			
Grade or Conceptual Category (HS only): First			
Domain (name and #): Measurement and Data (1.MD)			
Cluster: Represent and Interpret Data	1.MD.4 Organize, represent and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another		
Math Practices:			
<ul style="list-style-type: none"> ▪ Make sense of problems and persevere in solving them. ▪ Reason abstractly and quantitatively. ▪ Construct viable arguments and critique the reasoning of others. ▪ Model with mathematics. ▪ Use appropriate tools strategically. ▪ Attend to precision. ▪ Look for and make use of structure. ▪ Look for and express regularity in repeated reasoning. 			
<u>21st Century Themes</u>			
Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy	Health Literacy
			Civic Literacy
<u>21st Century Skills</u>			
Creativity and Innovation	X	Critical Thinking and Problem Solving	Information Literacy
Media Literacy		ICT Literacy	Life and Career Skills
			Communication and Collaboration

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Geometry		Unit #: 15
Course or Grade Level: Math – 1st grade		Length of Time: 2 ½ weeks
Date Created: November 8, 2011		BOE Approval Date:
Pacing	Week #1: Lessons 15.1 through 15.4 Week #2: Lessons 15.5 through 15.9 Week #3: Lesson 15.10, review and test 2012-13 Dates: Apr. 16 through May 1	
Essential Questions	How can shapes and solids be described, compared, and used to make other shapes?	
Content	<ul style="list-style-type: none"> ▪ Geometry: Identifying plane shapes ▪ Problem Solving: Make an organized list ▪ Geometry: Properties of plane shapes ▪ Geometry: Building with shapes ▪ Geometry: Making new shapes from shapes ▪ Geometry: Identifying solid figures ▪ Geometry: Flat surfaces and vertices ▪ Geometry: Sorting solid figures ▪ Geometry: Building with solid figures ▪ Problem Solving: Use reasoning 	
Skills	<ul style="list-style-type: none"> ▪ Identify and name standard plane shapes and recognize them in the environment ▪ Make organized lists to solve problems ▪ Sort plane shapes and identify their properties ▪ Combine plane shapes to make different pictures ▪ Combine two dimensional geometric shapes to make new two dimensional geometric shapes ▪ Identify and name standard geometric solids and recognize them in the environment ▪ Count the number of flat surfaces and vertices on geometric solids ▪ Identify geometric solids (sphere, cone, cylinder, rectangular prism, and cube) and sort by various attributes ▪ Combine solid figures to make new solid figures ▪ Identify defining and non-defining attributes of plane shapes and solid figures 	
Assessments	<ul style="list-style-type: none"> ▪ Formative : Lesson Quick Checks, Anecdotal records, Teacher Observation, Worksheet Pages ▪ Summative : Topic Tests (Multiple Choice and Constructed Response), Performance Task, Benchmark Tests at Beginning, Middle, and End of Year 	
Interventions / differentiated instruction	<ul style="list-style-type: none"> ▪ Re-teaching Masters ▪ On-level Masters ▪ Enrichment Masters ▪ Centers ▪ ELL Mini-lessons 	
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 	
Lesson resources / activities	<ul style="list-style-type: none"> ▪ Pearson website ▪ enVision text ▪ Smart boards ▪ Manipulatives (as needed) 	
Common Core State Standards		
Grade or Conceptual Category (HS only): First		
Domain (name and #): Geometry (1.G)		
Cluster: Reason with shapes and their attributes	1.G.1 Distinguish between defining attributes (e.g. triangles are closed and three-sided) versus non-defining attributes (e.g. color, orientation, overall size); build and draw shapes to possess defining attributes.	
	1.G.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. <i>Students do not need to learn formal names such as “right rectangular prism.”</i>	
Math Practices:		
<ul style="list-style-type: none"> ▪ Make sense of problems and persevere in solving them. ▪ Reason abstractly and quantitatively. ▪ Construct viable arguments and critique the reasoning of others. ▪ Model with mathematics. ▪ Use appropriate tools strategically. 		

- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

21st Century Themes

	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
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21st Century Skills

	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills		

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Fractions of Shapes		Unit #: 16
Course or Grade Level: Math – 1st grade		Length of Time: 2 ½ weeks
Date Created: November 8, 2011		BOE Approval Date:
Pacing	Week #1: Lessons 16.1 & 16.2 Week #2: Lessons 16.3 & 16.4, review and test, review for End of year benchmark Week #3: Review for benchmark and End of year benchmark 2012-13 Dates: May 2 through May 16	
Essential Questions	How can fractions be used to name a part of a whole object?	
Content	<ul style="list-style-type: none"> ▪ Geometry: Making equal parts ▪ Geometry: Describing equal parts of whole objects ▪ Geometry: Making halves and fourths of rectangles and circles ▪ Problem Solving: Draw a picture 	
Skills	<ul style="list-style-type: none"> ▪ Determine whether a shape is divided into equal or unequal parts ▪ Describe equal parts of a shape ▪ Identify halves and fourths of circles and rectangles ▪ Draw pictures to solve problems related to parts of a whole 	
Assessments	<ul style="list-style-type: none"> ▪ Formative : Lesson Quick Checks, Anecdotal records, Teacher Observation, Worksheet Pages ▪ Summative : Topic Tests (Multiple Choice and Constructed Response), Performance Task, Benchmark Tests at Beginning, Middle, and End of Year 	
Interventions / differentiated instruction	<ul style="list-style-type: none"> ▪ Re-teaching Masters ▪ On-level Masters ▪ Enrichment Masters ▪ Centers ▪ ELL Mini-lessons 	
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 	
Lesson resources / activities	<ul style="list-style-type: none"> ▪ Pearson website ▪ enVision text ▪ Smart boards ▪ Manipulatives (as needed) 	

Common Core State Standards

Grade or Conceptual Category (HS only): First

Domain (name and #): Geometry (1.G)

Cluster: Reason with shapes and their attributes	1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.
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- Math Practices:**
- Make sense of problems and persevere in solving them.
 - Reason abstractly and quantitatively.
 - Construct viable arguments and critique the reasoning of others.
 - Model with mathematics.
 - Use appropriate tools strategically.
 - Attend to precision.
 - Look for and make use of structure.
 - Look for and express regularity in repeated reasoning.

21st Century Themes

	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
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21st Century Skills

	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills		

**Pine Hill Public Schools
Mathematics Curriculum**

Unit Title: Counting Money		Unit #: 13 (supplemental lesson from EnVision 2009)					
Course or Grade Level: Math – 1st grade		Length of Time: 4 weeks					
Date Created: 12/3/11		BOE Approval Date:					
Pacing	Week #1: Lesson 13.1 Week #2: Lessons 13.2 & 13.3, review and test Supplemental lessons May 28 through June 7(from Step Up and EnVision Math Diagnosis and Intervention System) SL(Step Up)8, SL9, SL10, D29, D30, D32, D34, D76, and K26 2012-13 Dates: May 17 through June 7						
Essential Questions	What are the values of a penny, nickel, dime, or quarter?						
Content	<ul style="list-style-type: none"> ▪ Money: Values of Penny and Nickel ▪ Money: Values of Penny, Nickel, and Dime ▪ Money: Value of Quarter 						
Skills	<ul style="list-style-type: none"> ▪ Identify the value of combinations of nickels and pennies ▪ Identify the value of combinations of dimes, nickels, and pennies ▪ Identify a quarter and find groups of coins that have the same value as a quarter 						
Assessments	<ul style="list-style-type: none"> ▪ Formative : Lesson Quick Checks, Anecdotal records, Teacher Observation, Worksheet Pages ▪ Summative : Topic Tests (Multiple Choice and Constructed Response), Performance Task, Benchmark Tests at Beginning, Middle, and End of Year 						
Interventions / differentiated instruction	<ul style="list-style-type: none"> ▪ Re-teaching Masters ▪ On-level Masters ▪ Enrichment Masters ▪ Centers ▪ ELL Mini-lessons 						
Inter-disciplinary Connections	<ul style="list-style-type: none"> ▪ Altering word problems to reflect current classroom themes ▪ Theme based center activities ▪ Connecting reading strategies to problem solving 						
Lesson resources / activities	<ul style="list-style-type: none"> ▪ Pearson website ▪ enVision text ▪ Smart boards ▪ Manipulatives (as needed) 						
Common Core State Standards							
Grade or Conceptual Category (HS only):							
Domain (name and #): 2.MD (no longer a first grade standard)							
Cluster: Work with time and money	2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and cent symbol appropriately.						
Math Practices:							
<ul style="list-style-type: none"> ▪ Make sense of problems and persevere in solving them. ▪ Reason abstractly and quantitatively. ▪ Construct viable arguments and critique the reasoning of others. ▪ Model with mathematics. ▪ Use appropriate tools strategically. ▪ Attend to precision. ▪ Look for and make use of structure. ▪ Look for and express regularity in repeated reasoning. 							
<u>21st Century Themes</u>							
	Global Awareness	X	Financial, Economic, Business, and Entrepreneurial Literacy		Civic Literacy		Health Literacy
<u>21st Century Skills</u>							
	Creativity and Innovation	X	Critical Thinking and Problem Solving	X	Communication and Collaboration		Information Literacy
	Media Literacy		ICT Literacy	X	Life and Career Skills		