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Go Math! Scope and Sequence

	Introduction	Instruction	Assessment	TOTAL
Chapter 1: Addition Concepts	1 day	8 days	2 days	11 days
Chapter 2: Subtraction Concepts	1 day	9 days	2 days	12 days
Chapter 3: Addition Strategies	1 day	12 days	2 days	15 days
Chapter 4: Subtraction Strategies	1 day	6 days	2 days	9 days
Chapter 5: Addition and Subtraction Relationships	1 day	10 days	2 days	13 days
Chapter 6: Count and Model Numbers	1 day	10 days	2 days	13 days
Chapter 7: Compare Numbers	1 day	5 days	2 days	8 days
Chapter 8: Two-Digit Addition and Subtraction	1 day	9 days	2 days	12 days
Chapter 9: Measurement	1 day	9 days	2 days	12 days
Chapter 10: Represent Data	1 day	7 days	2 days	10 days
Chapter 11: Three-Dimensional Geometry	1 day	5 days	2 days	8 days
Chapter 12: Two-Dimensional Geometry	1 day	10 days	2 days	13 days
End of the Year Planner: Getting ready for Grade 2	4 days	20 days	2 days	26 days
Flex Days (projects, reteaching, standardized testing, etc.)	--	18 days	--	--
TOTAL DAYS	16 days	138 days	26 days	180 days

Common Core

Domain: 1.OA – Operations & Algebraic Thinking	
Cluster: 1.OA.A – Represent and solve problems involving addition and subtraction.	
Standard: 1.OA.A.1	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How do pictures show adding to? • How do you model adding to a group? • How do you model putting together? • How do you solve addition problems by making a model? • How can you show all the ways to make a number? • How can you show taking from with pictures? • How do you model taking from a group? • How do you model taking apart? • How do you solve subtraction problems by making a model? • How can you use models to compare and subtract? • How can you show all the ways to take apart a number? • How can acting out a problem help you solve the problem? • How can making a model help you solve a problem? • How do you choose when to add and when to subtract to solve a problem? 	<p>Students will:</p> <ul style="list-style-type: none"> • 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.
Standards: 1.OA.A.1, 1.OA.A.2	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1

	<ul style="list-style-type: none"> • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input checked="" type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Use pictures to “add to” and find sums. • Use concrete objects to solve “adding to” addition problems. • Use concrete objects to solve “putting together” addition problems. • Solve adding to and putting together situations using the strategy <i>make a model</i>. • Model and record all the ways to put together numbers within 10. • Use pictures to show “taking from” and find differences. • Use concrete objects to solve “taking from” subtraction problems. • Use concrete objects to solve “taking apart” subtraction problems. • Solve taking from and taking apart subtraction problems using the strategy <i>make a model</i>. • Model and compare groups to show the meaning of subtraction. • Model and record all of the ways to take apart numbers within 10. 	
Instructional Strategies	
<ul style="list-style-type: none"> • Have volunteers act out this adding to problem: There are 4 children writing on the board. Then 3 more children come. How many children are writing on the board? How many more children come? How many children are there? • Read the following problem aloud: There are 4 children in line. Then 5 children join them. Using connecting cubes, how can you show 4 children? Using connecting cubes, how can you show 5 children? Count all of your connecting cubes. What addition sentence can you write to show how many children there are in line? • How can you record adding 2 and 3 without writing an addition sentence? • What happens when you add? • On the board draw 6 stick figures. Circle and cross out 3 stick figures. Have children tell a story to match the picture and write the subtraction sentence. 	

- Is this a taking from problem or a taking apart problem? There are 4 bunnies. 1 bunny hops away. How many bunnies are there now? There are 4 balls. 1 ball is red. The rest of the balls are blue. How many balls are blue?
- Display 9 red counters in a closely scattered group. Below that, display 8 yellow counters in a scattered group. Why is it hard to tell if there are more red counters or more yellow counters?
- Ask children the following question. Encourage creativity in responses and accept any method that children can justify. How could you show subtracting 3 from 7 without writing a subtraction sentence?
- Discuss with children different ways to subtract. Ask for a volunteer to name a strategy used to subtract. Have the child tell a story problem that uses that strategy. Have children use counters to solve the volunteer's problem. Ask another volunteer to name a different subtraction strategy and tell a story problem for it. Have children use counters to solve this problem.
- Write the following problem on the board. Ali has 6 picture books. She gets 3 more picture books from the library. How many picture books does Ali have altogether? Is this an addition or subtraction problem? How do you know? What do you need to find out? How would you write a sentence to show this problem?
- Write some addition and subtraction problems/answers on the board but leave the plus and minus sign blank. How did you know whether to add or subtract?

Resources

- Refer to Go Math! Lesson(s): 1.1, 1.2, 1.3, 1.4, 1.7, 2.1, 2.2, 2.3, 2.4, 2.6, 2.8, 4.6, 5.1, 5.7
- Refer to Go Math! Teacher Edition and Student Edition page(s): *13A–13B, 13–16, 17A–17B, 17–20, 21A–21B, 21–24, 25A–25B, 25–27, 37A–37B, 37–40, 53A–53B, 53–56, 57A–57B, 57–60, 61A–61B, 61–64, 65A–65B, 65–68, 73A–73B, 73–75, 81A–81B, 81–84, 173A–173B, 173–176, 185A–185B, 185–188, 209A–209B, 209–212* (Note: Pages only in Teacher Edition are italics)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

14 Days

Domain: 1.OA – Operations & Algebraic Thinking	
Cluster: 1.OA.A – Represent and solve problems involving addition and subtraction.	
Standard: 1.OA.A.2	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> How do you solve addition word problems by drawing a picture? 	<p>Students will:</p> <ul style="list-style-type: none"> 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.
Standards: 1.OA.A.1, 1.OA.A.2	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> 8.1.P.A.1-6 8.1.P.B.1 8.1.P.C.1-2 8.1.P.E.1 8.1.P.F.1 	<ul style="list-style-type: none"> Mathematical Practices <ul style="list-style-type: none"> CCSS.Math.Practice.MP1-8 Science <ul style="list-style-type: none"> 5.1.P.A.1 5.1.P.B.1-3 5.1.P.C.1 5.1.P.D.1 Social Studies <ul style="list-style-type: none"> 6.1.P.A.1-3 6.1.P.B.1-2 6.1.P.D.1-4 Literacy <ul style="list-style-type: none"> CCSS.ELA-Literacy.SL.1.1-1.3 CCSS.ELA-Literacy.SL.1.4-1.6 CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input checked="" type="checkbox"/> Civic Literacy <input type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> Solve adding to and putting together situations using the strategy draw a picture. 	
Instructional Strategies	
<ul style="list-style-type: none"> Read this problem aloud for the class. Becky picked 5 apples. Sunita picked 7 apples. How many apples did they pick? Guide volunteers to demonstrate how to represent the 	

problem using counters.
Resources
<ul style="list-style-type: none">• Refer to Go Math! Lesson(s): 3.12• Refer to Go Math! Teacher Edition and Student Edition page(s): <i>141A–141B, 141–144</i> (Note: <i>Pages only in Teacher Edition are italics</i>)• Go Math! Animated Math Models (via Think Central)• HMH Mega Math (via Think Central)• Go Math! iTools (via Think Central)• Go Math! eGlossary (via Think Central)• Go Math! Destination Math (via Student Edition in Think Central)• Corresponding Go Math! Grab and Go for Activities/Literature/Games• Corresponding Go Math! Daily Routines• https://www-k6.thinkcentral.com/ePC/start.do• http://www.firstinmath.com/• http://www.corestandards.org/Math
Suggested Time Frame:
1 Day

Domain: 1.OA – Measurement & Data	
Cluster: 1.OA.B – Understand and apply properties of operations and the relationship between addition and subtraction.	
Standard: 1.OA.B.3	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • What happens when you add 0 to a number? • Why can you add addends in any order? • What happens if you change the order of the addends when you add? • How can you add three addends? • How can you group numbers to add three addends? 	<p>Students will:</p> <ul style="list-style-type: none"> • Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Limit category counts to be less than or equal to 10.
Standards: 1.OA.B.3, 1.OA.B.4	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	

- Understand and apply the Additive Identity Property for Addition.
- Explore the Commutative Property of Addition.
- Understand and apply the Commutative Property of Addition for sums within 20.
- Use the Associative Property of Addition to add three addends.
- Understand and apply the Associative Property or Commutative Property of Addition to add three addends.

Instructional Strategies

- Have children use counters to model the following problem. 5 black cats are on the rug. 3 striped cats are on the rug. How many cats are on the rug?
- Ask children the following question. If you add zero to a number, how can you get a sum of zero?
- Invite children to each draw a picture of a number from 1 to 10 of the same object. Have partners join their pictures and write an addition sentence for the two pictures. Then have them turn the pictures around and write the new addition sentence. For example, one partner may draw 5 cats, and the other partner may draw 3 cats.
- Review adding two numbers. Display different addition facts within 20 and have volunteers use counting strategies to check answers.
- Display 3-addend addition problems with sums within 20 and have children find each sum. Have volunteers demonstrate how they showed the addends, found the sum, and checked their answers.

Resources

- Refer to Go Math! Lesson(s): 1.5, 1.6, 3.1, 3.10, 3.11
- Refer to Go Math! Teacher Edition and Student Edition page(s): 29A–29B, 29–32, 33A–33B, 33–36, 97A–97B, 97–100, 133A–133B, 133–136, 137A–137B, 137–140 (Note: Pages only in Teacher Edition are italics)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

5 Days

Domain: 1.OA – Operations & Algebraic Thinking	
Cluster: 1.OA.B – Understand and apply properties of operations and the relationship between addition and subtraction.	
Standard: 1.OA.B.4	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> How can you use addition to help you find the answer to a subtraction fact? 	<p>Students will:</p> <ul style="list-style-type: none"> 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.
Standards: 1.OA.B.3, 1OA.B.4	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> 8.1.P.A.1-6 8.1.P.B.1 8.1.P.C.1-2 8.1.P.E.1 8.1.P.F.1 	<ul style="list-style-type: none"> Mathematical Practices <ul style="list-style-type: none"> CCSS.Math.Practice.MP1-8 Science <ul style="list-style-type: none"> 5.1.P.A.1 5.1.P.B.1-3 5.1.P.C.1 5.1.P.D.1 Social Studies <ul style="list-style-type: none"> 6.1.P.A.1-3 6.1.P.B.1-2 6.1.P.D.1-4 Literacy <ul style="list-style-type: none"> CCSS.ELA-Literacy.SL.1.1-1.3 CCSS.ELA-Literacy.SL.1.4-1.6 CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input checked="" type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> Recall addition facts to subtract numbers within 20. Use addition as a strategy to subtract numbers within 20. 	

Instructional Strategies
<ul style="list-style-type: none">• Have six volunteers come to the board. Ask each of them to write any addition fact and then sit down. Ask six new volunteers to come to the board. Have each new volunteer use the addends and sum (or parts and whole) of one of the addition facts on the board to write a subtraction fact. Repeat until all children have had a turn at the board.• Write the following numbers and symbols on the board: 7 3 4 + - = What addition sentence can you make with these numbers and signs? What subtraction sentence can you make with these numbers and signs? Repeat the activity with groups of numbers such as 2, 8, 6 and 7, 10, 3.
Resources
<ul style="list-style-type: none">• Refer to Go Math! Lesson(s): 4.2, 4.3• Refer to Go Math! Teacher Edition and Student Edition page(s): <i>157A–157B, 157–160, 161A–161B, 161–163</i> (Note: <i>Pages only in Teacher Edition are italics</i>)• Go Math! Animated Math Models (via Think Central)• HMH Mega Math (via Think Central)• Go Math! iTools (via Think Central)• Go Math! eGlossary (via Think Central)• Go Math! Destination Math (via Student Edition in Think Central)• Corresponding Go Math! Grab and Go for Activities/Literature/Games• Corresponding Go Math! Daily Routines• https://www-k6.thinkcentral.com/ePC/start.do• http://www.firstinmath.com/• http://www.corestandards.org/Math
Suggested Time Frame:
2 Days

Domain: 1.OA – Operations & Algebraic Thinking	
Cluster: 1.OA.C – Add and subtract within 20.	
Standard: 1.OA.C.5	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How do you count on 1, 2, or 3? • How can you count back 1, 2, or 3? 	Students will: <ul style="list-style-type: none"> • Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
Standards: 1.OA.C.5, 1.OA.C.6	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Use count on 1, 2, or 3 as a strategy to find sums within 20. • Use count back 1, 2, or 3 as a strategy to subtract. 	
Instructional Strategies	
<ul style="list-style-type: none"> • Review adding to with pairs of children. Give partners a red cube train with more than 4 cubes and a yellow cube train with 1, 2, or 3 cubes. Have partners use the two cube trains to model adding to. Then have partners write the addition fact on their MathBoards (or paper). Have volunteers share their addition facts and models with the 	

class.

- Have children practice counting forward and backward from any number. Give them directions such as the following: Start with 4. Count forward. What are the next 3 numbers? Start with 8. Count backward. What are the next 2 numbers? Start with 10. Count forward. What are the next 3 numbers? Challenge volunteers to give counting directions for the rest of the class to follow.

Resources

- Refer to Go Math! Lesson(s): 3.2, 4.1
- Refer to Go Math! Teacher Edition and Student Edition page(s): *101A–101B, 101–104, 153A–153B, 153–156* (Note: *Pages only in Teacher Edition are italics*)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

2 Days

Domain: 1.OA – Operations & Algebraic Thinking	
Cluster: 1.OA.C – Add and subtract within 20.	
Standard: 1.OA.C.6	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • Why are some addition facts easy to add? • Why are some subtraction facts easy to subtract? • What are doubles facts? • How can you use doubles to help you add? • How can you use what you know about doubles to find other sums? • How can you use a ten frame to add 10 and some more? • How do you use the make a ten strategy to add? • How can you make a ten to help you add? • How can you make a ten to help you subtract? • How do you break apart a number to subtract? • How do related facts help you find missing numbers? • How do you know if addition and subtraction facts are related? • How can you use addition to check subtraction? • How can you add and subtract in different ways to make the same number? • How can addition and subtraction strategies help you find sums and differences? • What strategies can you use to add and subtract? 	<p>Students will:</p> <ul style="list-style-type: none"> • 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 $6 + 6 + 1 = 12 + 1 = 13$).
Standards: 1.OA.C.5, 1.OA.C.6	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 	<ul style="list-style-type: none"> • Mathematical Practices

<ul style="list-style-type: none"> • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input checked="" type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Build fluency for addition within 10. • Build fluency for subtraction within 10. • Use doubles as a strategy to solve addition facts with sums within 20. • Use doubles to create equivalent but easier sums. • Use doubles plus 1 and doubles minus 1 as strategies to find sums within 20. • Use the strategies count on, doubles, doubles plus 1, and doubles minus 1 to practice addition facts within 20. • Use a ten frame to add 10 and an addend less than 10. • Use <i>make a ten</i> as a strategy to find sums within 20. • Use numbers to show how to use the make a ten strategy to add. • Use <i>make a 10</i> as a strategy to subtract. • Subtract by breaking apart to make a ten. • Record related facts within 20. • Identify related addition and subtraction facts within 20. • Apply the inverse relationship of addition and subtraction. • Represent equivalent forms of numbers using sums and differences within 20. • Add and subtract facts within 20 and demonstrate fluency for addition and subtraction within 10. 	

- Add and subtract within 20.

Instructional Strategies

- Ask children questions like the following. Then have them come to the board to show examples. Discuss their responses. If you know $4 + 3 = 7$, what other fact do you know? Explain.
- Write the following on the board. $5 \circ 2 = 3$. What should go inside the circle to make this a true number sentence? How do you know what it should be?
- Hold up one hand with all five fingers extended, and have children tell how many fingers they see. While keeping the first hand up, raise the other hand.
- Review doubles with children. Have partners stamp 3 cubes on the top of the workmat. How do you know that the cube trains show a doubles fact?
- Have partners play a game to review doubles facts. To play, one child in each pair connects some cubes and says to the partner, "Copy that!" The partner connects the same number of cubes and writes the doubles fact for the models. After they record the doubles fact, have partners switch roles and play again. Encourage children to start with a different number of cubes.
- Have children observe as you drop 6 counters into a cup. Write 6 on an adhesive note and attach it to the side of the cup. Place 2 counters on the table outside the cup. How many counters are inside the cup? How many counters are outside the cup? Count on to find how many in all. What will you say as you count? Repeat the activity with other numbers, counting on 1, 2, or 3 to review the concept of counting on.
- Ask children: how can you show 10 in different ways?
- Have children use counters to practice counting within 20. What is the sum for $6 + 5$? Repeat with other problems with sums greater than 10.
- Ask children: how do the counters help you find an answer?
- Ask children: how do you know that the number 18 uses one full ten frame and 8 counters in another ten frame?
- Have children use connecting cubes in two colors to create an addition sentence. Then have children break off one color from the cube train to show the related subtraction fact. How does your subtraction fact undo the addition fact?
- Have children use red and blue connecting cubes to show the addition sentence $3 + 2 = 5$. Then have children turn their cube train model to show a different and related addition fact. If you solve one addition fact, how do you also know the sum for the same numbers in a different order?
- Review the think addition strategy with children. Write $12 - 5$ on the board. 5 plus what number equals 12? What addition sentence can you write? So, what is $12 - 5$? Repeat with different subtraction facts.
- What strategies can you use to find the sum of $9 + 8$? Explain.
- Have pairs of children add one-digit numbers. They take turns, as one partner creates an addition problem and the other partner enters the answer. Then have partners check that the sum is correct. What is $5 + 9$?
- Have children name as many addition and subtraction facts as they can. Record the facts on the board. How can you find a sum or a difference if you do not know it right

away?
Resources
<ul style="list-style-type: none"> • Refer to Go Math! Lesson(s): 1.8, 2.9, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.4, 4.5, 5.2, 5.3, 5.4, 5.8, 5.10, 8.1 • Refer to Go Math! Teacher Edition and Student Edition page(s): <i>41A–41B, 41–44, 85A–85B, 85–88, 105A–105B, 105–108, 109A–109B, 109–112, 113A–113B, 113–116, 117A–117B, 117–119, 121A–121B, 121–124, 125A–125B, 125–128, 129A–129B, 129–132, 165A–165B, 165–168, 169A–169B, 169–172, 189A–189B, 189–192, 193A–193B, 193–196, 197A–197B, 197–199, 213A–213B, 213–216, 221A–221B, 221–224, 317A–317B, 317–320</i> (Note: <i>Pages only in Teacher Edition are italics</i>) • Go Math! Animated Math Models (via Think Central) • HMH Mega Math (via Think Central) • Go Math! iTools (via Think Central) • Go Math! eGlossary (via Think Central) • Go Math! Destination Math (via Student Edition in Think Central) • Corresponding Go Math! Grab and Go for Activities/Literature/Games • Corresponding Go Math! Daily Routines • https://www-k6.thinkcentral.com/ePC/start.do • http://www.firstinmath.com/ • http://www.corestandards.org/Math
Suggested Time Frame:
17 Days

Domain: 1.OA – Operations & Algebraic Thinking	
Cluster: 1.OA.D – Work with addition and subtraction equations.	
Standard: 1.OA.D.7	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> How can you decide if a number sentence is true or false? 	<p>Students will:</p> <ul style="list-style-type: none"> Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
Standards: 1.OA.D.7, 1.OA.D.8	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> 8.1.P.A.1-6 8.1.P.B.1 8.1.P.C.1-2 8.1.P.E.1 8.1.P.F.1 	<ul style="list-style-type: none"> Mathematical Practices <ul style="list-style-type: none"> CCSS.Math.Practice.MP1-8 Science <ul style="list-style-type: none"> 5.1.P.A.1 5.1.P.B.1-3 5.1.P.C.1 5.1.P.D.1 Social Studies <ul style="list-style-type: none"> 6.1.P.A.1-3 6.1.P.B.1-2 6.1.P.D.1-4 Literacy <ul style="list-style-type: none"> CCSS.ELA-Literacy.SL.1.1-1.3 CCSS.ELA-Literacy.SL.1.4-1.6 CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> Determine if an equation is true or false. 	
Instructional Strategies	
<ul style="list-style-type: none"> Write $4 + 5 = \underline{\quad}$ and $10 - 1 = \underline{\quad}$ on the board. Have children find the sum and the 	

difference. What do you notice about the sum and the difference? What other ways can you make 9?
Resources
<ul style="list-style-type: none">• Refer to Go Math! Lesson(s): 5.9• Refer to Go Math! Teacher Edition and Student Edition page(s): 217A–217B, 217–220 (Note: <i>Pages only in Teacher Edition are italics</i>)• Go Math! Animated Math Models (via Think Central)• HMH Mega Math (via Think Central)• Go Math! iTools (via Think Central)• Go Math! eGlossary (via Think Central)• Go Math! Destination Math (via Student Edition in Think Central)• Corresponding Go Math! Grab and Go for Activities/Literature/Games• Corresponding Go Math! Daily Routines• https://www-k6.thinkcentral.com/ePC/start.do• http://www.firstinmath.com/• http://www.corestandards.org/Math
Suggested Time Frame:
1 Day

Domain: 1.OA – Operations & Algebraic Thinking	
Cluster: 1.OA.D – Work with addition and subtraction equations.	
Standard: 1.OA.D.8	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How can you use pictures to compare and subtract? • What happens when you subtract 0 from a number? • How can you use a related fact to find a missing number? 	<p>Students will:</p> <ul style="list-style-type: none"> • Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.
Standards: 1.OA.D.7, 1.OA.D.8	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input checked="" type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Compare pictorial groups to understand subtraction. • Identify how many are left when subtracting all or 0. • Use related facts to determine unknown numbers. 	

- Use a related fact to subtract.

Instructional Strategies

- Model to solve this problem. Travis and Rob make sandwiches for a family picnic. Travis makes 6 sandwiches. Rob makes 4 sandwiches. How many more sandwiches does Travis make than Rob? How can you show how many more sandwiches Travis made than Rob?
- Remind children that zero means none or nothing. Have five volunteers act out number stories: Hold up 3 fingers. Now hold up zero fingers. Clap 4 times. Now clap zero times. Then challenge children to name things that there are zero of in the classroom. Answers might include elephants, dinosaurs, or mountains.
- Read this problem to children. Carlos has 8 football cards and 7 baseball cards. How many sports cards does he have? How can you solve this problem?
- Read this problem to children. Elizabeth has 12 pens. Some of the pens have blue ink. The same number of pens have black ink. How many pens does she have in each color?

Resources

- Refer to Go Math! Lesson(s): 2.5, 2.7, 5.5, 5.6
- Refer to Go Math! Teacher Edition and Student Edition page(s): *69A–69B, 69–72, 77A–77B, 77–80, 201A–201B, 201–204, 205A–205B, 205–208* (Note: *Pages only in Teacher Edition are italics*)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

4 Days

Domain: 1.NBT – Number & Operations in Base Ten	
Cluster: 1.NBT.A – Represent and solve problems involving addition and subtraction.	
Standard: 1.NBT.A.1	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How can knowing a counting pattern help you count to 120? • How do numbers change as you count by tens to 120? • How can you model, read, and write numbers from 100 to 110? • How can you model, read, and write numbers from 110 to 120? 	<p>Students will:</p> <ul style="list-style-type: none"> • 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.
Standards: 1.NBT.A.1	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input checked="" type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Count by ones to extend a counting sequence up to 120. • Count by tens from any number to extend a counting sequence up to 120. 	

- Read and write numerals to represent a number of 100 to 110 objects.
- Read and write numerals to represent a number of 110 to 120 objects.

Instructional Strategies

- Display the Hundred Chart. Point to each number in sequence as the class counts aloud to 100. Have children look for patterns in the chart. Point to the row showing 51 through 60. What do you notice about each number in a row as you count?
- To review counting by tens, point to numbers 10, 20, 30, 40, 50, 60, 70, 80, 90, and 100 on the Counting Tape. As you touch each number, have children say the number you are pointing to. Then have children count orally by tens to 100.
- Display the Hundred Chart. Count aloud with children from 1 to 100 as you point to each number on the chart. What pattern do you notice as you count across a row? Use the chart again to count together by tens, starting at 10. Point to each number as you count. Repeat counting by tens, this time starting at 4. What pattern do you notice as you count down a column?
- Ask children: what number is 10 tens and 3 more? What number is 1 more than 105?

Resources

- Refer to Go Math! Lesson(s): 6.1, 6.2, 6.9, 6.10
- Refer to Go Math! Teacher Edition and Student Edition page(s): 261A–261B, 261–264, 265A–265B, 265–268 (Note: Pages only in Teacher Edition are italics)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
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- <http://www.corestandards.org/Math>

Suggested Time Frame:

4 Days

Domain: 1.NBT – Number & Operations in Base Ten	
Cluster: 1.NBT.B – Understand place value.	
Standard: 1.NBT.B.2	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> How can you group cubes to show a number as tens and ones? How can you show numbers to 100 as tens and ones? 	Students will: <ul style="list-style-type: none"> Understand that the two digits of a two-digit number represent amounts of tens and ones.
Standards: 1.NBT.B.2 , 1.NBT.B.2a, 1.NBT.B.2b, 1.NBT.B.2c, 1.NBT.B.3	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> 8.1.P.A.1-6 8.1.P.B.1 8.1.P.C.1-2 8.1.P.E.1 8.1.P.F.1 	<ul style="list-style-type: none"> Mathematical Practices <ul style="list-style-type: none"> CCSS.Math.Practice.MP1-8 Science <ul style="list-style-type: none"> 5.1.P.A.1 5.1.P.B.1-3 5.1.P.C.1 5.1.P.D.1 Social Studies <ul style="list-style-type: none"> 6.1.P.A.1-3 6.1.P.B.1-2 6.1.P.D.1-4 Literacy <ul style="list-style-type: none"> CCSS.ELA-Literacy.SL.1.1-1.3 CCSS.ELA-Literacy.SL.1.4-1.6 CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> Group objects to show numbers to 50 as tens and ones. Group objects to show numbers to 100 as tens and ones. 	
Instructional Strategies	
<ul style="list-style-type: none"> Distribute connecting cubes to pairs of children. Have children show 15 cubes. Predict how many tens you can make. How many ones will you have left over? Partners should then work together to connect cubes to model 15 as 1 ten and 5 ones. 	

- Have children use base-ten blocks to show a variety of two-digit numbers less than 50. You may wish to make a list of numbers for children to show, such as 21, 30, 36, 49.

Resources

- Refer to Go Math! Lesson(s): 6.6. 6.7
- Refer to Go Math! Teacher Edition and Student Edition page(s): 241A–241B, 241–244, 245A–245B, 245–248, 273A–273B, 273–276, 277A–277B, 277–280 (Note: *Pages only in Teacher Edition are italics*)
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- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
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- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

2 Days

Domain: 1.NBT – Number & Operations in Base Ten	
Cluster: 1.NBT.B – Understand place value.	
Standard: 1.NBT.B.2a	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How can you model and name groups of ten? • How can making a model help show a number in different ways? 	<p>Students will:</p> <ul style="list-style-type: none"> • Understand that the two digits of a two-digit number represent amounts of tens and ones. • Understand the following as special cases: <ul style="list-style-type: none"> ○ 10 can be thought of as a bundle of ten ones — called a “ten.”
Standards: 1.NBT.B.2, 1.NBT.B.2a, 1.NBT.B.2b, 1.NBT.B.2c, 1.NBT.B.3	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input checked="" type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Use objects, pictures, and numbers to represent tens. • Solve problems using the strategy make a model. 	

Instructional Strategies

- Have children create their own group of ten and ones. Provide pairs with 10 craft sticks and a rubber band. How many craft sticks do you have? Encourage children to think of their 10 sticks as 10 ones. How can you put your 10 sticks together to make a ten? Give each pair 1-9 more craft sticks, emphasizing that these craft sticks represent ones. Have pairs write the number of tens and the number of ones that their model shows. Then have pairs share their models with the class.
- Demonstrate how to show two-digit numbers with your fingers. Flash 10 fingers at a time as the class counts by tens. Then show fewer than 10 fingers, and have the class count on by ones. Use this method to have children identify numbers such as 24, 41, and 82. After each representation, encourage children to describe how tens and ones helped them identify the number.

Resources

- Refer to Go Math! Lesson(s): 6.5, 6.8
- Refer to Go Math! Teacher Edition and Student Edition page(s): 257A–257B, 257–259, 269A–269B, 269–272 (Note: Pages only in Teacher Edition are italics)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
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- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

2 Days

Domain: 1.NBT – Number & Operations in Base Ten	
Cluster: 1.NBT.B – Understand place value.	
Standard: 1.NBT.B.2b	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How can you use different ways to write a number as tens and ones? • How can you show a number as tens and ones? 	<p>Students will:</p> <ul style="list-style-type: none"> • Understand that the two digits of a two-digit number represent amounts of tens and ones. • Understand the following as special cases: <ul style="list-style-type: none"> ○ The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
Standards: 1.NBT.B.2, 1.NBT.B.2a, 1.NBT.B.2b, 1.NBT.B.2c, 1.NBT.B.3	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	

- Use models and write to represent equivalent forms of ten and ones.
- Use objects, pictures, and numbers to represent a ten and some ones.

Instructional Strategies

- Have two children stand in front of the class and hold up their hands with fingers spread. How many fingers does each child have? How can you find out how many fingers both children have in all? How many fingers are there altogether? Repeat the activity with groups of 3 to 9 children. Ask classmates to count by tens to find the total number of spread fingers.
- Present this problem to children: Suppose you are picking flowers to make a bouquet. You can pick red flowers and yellow flowers. You can pick 10 flowers. How many of each color flower will you pick? Let children work independently, drawing pictures or using manipulatives. Then have volunteers share their work. How are all the bouquets alike? How are they different?

Resources

- Refer to Go Math! Lesson(s): 6.3, 6.4
- Refer to Go Math! Teacher Edition and Student Edition page(s): 249A–249B, 249–252, 253A–253B, 253–256 (Note: *Pages only in Teacher Edition are italics*)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
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- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

2 Days

Domain: 1.NBT – Number & Operations in Base Ten	
Cluster: 1.NBT.B – Understand place value.	
Standard: 1.NBT.B.2c	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> How can you model and name groups of ten? 	<p>Students will:</p> <ul style="list-style-type: none"> Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: <ul style="list-style-type: none"> 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).
Standards: 1.NBT.B.2, 1.NBT.B.2a, 1.NBT.B.2b, 1.NBT.B.2c, 1.NBT.B.3	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> 8.1.P.A.1-6 8.1.P.B.1 8.1.P.C.1-2 8.1.P.E.1 8.1.P.F.1 	<ul style="list-style-type: none"> Mathematical Practices <ul style="list-style-type: none"> CCSS.Math.Practice.MP1-8 Science <ul style="list-style-type: none"> 5.1.P.A.1 5.1.P.B.1-3 5.1.P.C.1 5.1.P.D.1 Social Studies <ul style="list-style-type: none"> 6.1.P.A.1-3 6.1.P.B.1-2 6.1.P.D.1-4 Literacy <ul style="list-style-type: none"> CCSS.ELA-Literacy.SL.1.1-1.3 CCSS.ELA-Literacy.SL.1.4-1.6 CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	

- Use objects, pictures, and numbers to represent tens.

Instructional Strategies

- Have children create their own group of ten and ones. Provide pairs with 10 craft sticks and a rubber band. How many craft sticks do you have? Encourage children to think of their 10 sticks as 10 ones. How can you put your 10 sticks together to make a ten? Give each pair 1-9 more craft sticks, emphasizing that these craft sticks represent ones. Have pairs write the number of tens and the number of ones that their model shows. Then have pairs share their models with the class.

Resources

- Refer to Go Math! Lesson(s): 6.5
- Refer to Go Math! Teacher Edition and Student Edition page(s): 257A–257B, 257–259
(Note: *Pages only in Teacher Edition are italics*)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

1 Day

Domain: 1.NBT – Number & Operations in Base Ten	
Cluster: 1.NBT.B – Understand place value.	
Standard: 1.NBT.B.3	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How can making a model help you show a number in different ways? • How can you compare two numbers to find which is greater? • How can you compare two numbers to find which is less? • How can you use symbols to show how numbers compare? • How can making a model help you compare numbers? 	<p>Students will:</p> <ul style="list-style-type: none"> • Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
Standards: 1.NBT.B.2, 1.NBT.B.2a, 1.NBT.B.2b, 1.NBT.B.2c, 1.NBT.B.3	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	

- Solve problems using the strategy make a model.
- Model and compare two-digit numbers to determine which is greater.
- Model and compare two-digit numbers to determine which is less.
- Use symbols for is less than “<”, is greater than “>”, and is equal to “=” to compare numbers.
- Solve problems using the strategy make a model.

Instructional Strategies

- Demonstrate how to show two-digit numbers with your fingers. Flash 10 fingers at a time as the class counts by tens. Then show fewer than 10 fingers, and have the class count on by ones. Use this method to have children identify numbers such as 24, 41, and 82. After each representation, encourage children to describe how tens and ones helped them identify the number.
- Have pairs of children use base-ten blocks to build two-digit numbers. Taking turns, one child names a two-digit number and the other child stamps tens and ones to represent the number. How can you use tens and ones to build 15?
- On three index cards write 21, 15, and >. Give the cards to three volunteers. They arrange themselves at the front of the class to make a greater than comparison. Remind children that the pointed end of the symbol is next to, or “points to,” the number that is less. Discuss the comparison with the class. How do you read this comparison? How do you know that 21 is greater?
- Have pairs of children use base-ten blocks to compare two-digit numbers. Have each partner show a two-digit number with the blocks. Then partners should work together to compare the numbers and check their work. Write a comparison on the board, such as $49 < 51$. What does the symbol mean? How do you know? When do you use the *less than* symbol to compare numbers?
- Write the numbers 27 through 34 out of order where children can see them on the board. Which numbers would you say to count from 27 to 31? How would you write the numbers? Ask a volunteer to write the numbers in the order as discussed. Repeat the activity for the numbers you would say to count from 29 to 34.

Resources

- Refer to Go Math! Lesson(s): 6.8, 7.1, 7.2, 7.3, 7.4
- Refer to Go Math! Teacher Edition and Student Edition page(s): 269A–269B, 269–272, 289A–289B, 289–292, 293A–293B, 293–296, 297A–297B, 297–299, 301A–301B, 301–304 (Note: *Pages only in Teacher Edition are italics*)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)

- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

5 Days

Domain: 1.NBT – Number & Operations in Base Ten	
Cluster: 1.NBT.C – Use place value understanding and properties of operations to add and subtract.	
Standard: 1.NBT.C.4	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How can you add tens? • How can you use a hundred chart to count on by ones or tens? • How can models help you add ones or tens to a two-digit number? • How can making a ten help you add a two-digit number and a one-digit number? • How can you model tens and ones to help you add two-digit numbers? • How can drawing a picture help you explain how to solve an addition problem? • What different ways can you use to add and subtract? 	<p>Students will:</p> <ul style="list-style-type: none"> • 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.
Standards: 1.NBT.C.4 , 1.NBT.C.5, 1.NBT.C.6	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:

<input type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Draw a model to add tens. • Use a hundred chart to find sums. • Use concrete models to add ones or tens to a two-digit number. • Make a ten to add a two-digit number and a one-digit number. • Use tens and ones to add two-digit numbers. • Solve and explain two-digit addition word problems using the strategy draw a picture. • Add and subtract within 100, including continued practice with facts within 20. 	
Instructional Strategies	
<ul style="list-style-type: none"> • Have children consider the following question. How can you solve $1 + 7$? Invite children to discuss their methods. How did you find the sum? What would be the sum of 1 ten + 7 tens? Explain. • Distribute a hundred chart to each child and allow a few minutes for them to look it over. As a group use the chart to count aloud from 1 to 100. Suggest that children touch each number on the chart as they say it. Discuss how numbers from 1 to 100 appear on the hundred chart. Allow children to make observations about patterns they may see by asking the following questions. How can you use a hundred chart to add ones? How can you use a hundred chart to add tens? • Have pairs use base-ten blocks to model a two-digit number. One child thinks of a two-digit number, says it, and then records it without the partner seeing it. Then the partner models the number. After the partner has modeled the number, the other child reveals the number. Have partners switch roles. How can you use tens and ones to show 26? • Use base-ten blocks to show numbers as tens and ones. Pose the following challenges. Show a number with tens but no ones. Show a number with ones but no tens. Show a number with more ones than tens. Show a number with more tens than ones. • Invite a volunteer to show 57 with base-ten blocks and then share the tens and ones with a partner in some way. How did you share the blocks? If you put the tens and ones back together, what will the total be? Explain. • Have partners use base-ten blocks to add two-digit numbers. You may wish to provide addition problems for children to solve. For example, children may find $36 + 17$. How can you use tens and ones to show 36? How can you use tens and ones to show 17? Have partners find the sum. • Write the numbers 15, 50, and 51 on the board. How can you show tens and ones in each number? How are 15 and 51 alike? How are 15 and 51 different? 	
Resources	

- Refer to Go Math! Lesson(s): 8.2, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9
- Refer to Go Math! Teacher Edition and Student Edition page(s): 321A–321B, 321–324, 329A–329B, 329–332, 333A–333B, 333–336, 337A–337B, 337–340, 341A–341B, 341–344, 345A–345B, 345–348, 349A–349B, 349–352 (Note: *Pages only in Teacher Edition are italics*)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

7 Days

Domain: 1.NBT – Number & Operations in Base Ten	
Cluster: 1.NBT.C – Use place value understanding and properties of operations to add and subtract.	
Standard: 1.NBT.C.5	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> How can you identify numbers that are 10 less or 10 more than a number? 	Students will: <ul style="list-style-type: none"> Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
Standards: 1.NBT.C.4 , 1.NBT.C.5, 1.NBT.C.6	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> 8.1.P.A.1-6 8.1.P.B.1 8.1.P.C.1-2 8.1.P.E.1 8.1.P.F.1 	<ul style="list-style-type: none"> Mathematical Practices <ul style="list-style-type: none"> CCSS.Math.Practice.MP1-8 Science <ul style="list-style-type: none"> 5.1.P.A.1 5.1.P.B.1-3 5.1.P.C.1 5.1.P.D.1 Social Studies <ul style="list-style-type: none"> 6.1.P.A.1-3 6.1.P.B.1-2 6.1.P.D.1-4 Literacy <ul style="list-style-type: none"> CCSS.ELA-Literacy.SL.1.1-1.3 CCSS.ELA-Literacy.SL.1.4-1.6 CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> Solve problems using the strategy make a model. Model and compare two-digit numbers to determine which is greater. Model and compare two-digit numbers to determine which is less. 	

- Use symbols for is less than “<”, is greater than “>”, and is equal to “=” to compare numbers.
- Solve problems using the strategy make a model.

Instructional Strategies

- Have children use base-ten blocks to model 35 and 36. Which number is less, 35 or 36? How does your model show that 35 is less than 36? What number is one more than 36? How do you know?

Resources

- Refer to Go Math! Lesson(s): 7.5
- Refer to Go Math! Teacher Edition and Student Edition page(s): *305A–305B, 305–308*
(Note: *Pages only in Teacher Edition are italics*)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

1 Day

Domain: 1.NBT – Number & Operations in Base Ten	
Cluster: 1.NBT.C – Use place value understanding and properties of operations to add and subtract.	
Standard: 1.NBT.C.6	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How can you subtract tens? • What different ways can you use to add and subtract? 	<p>Students will:</p> <ul style="list-style-type: none"> • 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.
Standards: 1.NBT.C.4 , 1.NBT.C.5, 1.NBT.C.6	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration

Student Learning Targets/Objectives
<ul style="list-style-type: none">• Draw a model to subtract tens.• Add and subtract within 100, including continued practice with facts within 20.
Instructional Strategies
<ul style="list-style-type: none">• Have children consider the question below. How can you solve $9 - 5$? Invite children to discuss their methods. How did you find the difference? What would be the difference of 9 tens – 5 tens? Explain.• Write the numbers 15, 50, and 51 on the board. How can you show tens and ones in each number? How are 15 and 51 alike? How are 15 and 51 different?
Resources
<ul style="list-style-type: none">• Refer to Go Math! Lesson(s): 8.3, 8.9• Refer to Go Math! Teacher Edition and Student Edition page(s): 325A–325B, 325–327, 349A–349B, 349–352 (Note: Pages only in Teacher Edition are italics)• Go Math! Animated Math Models (via Think Central)• HMH Mega Math (via Think Central)• Go Math! iTools (via Think Central)• Go Math! eGlossary (via Think Central)• Go Math! Destination Math (via Student Edition in Think Central)• Corresponding Go Math! Grab and Go for Activities/Literature/Games• Corresponding Go Math! Daily Routines• https://www-k6.thinkcentral.com/ePC/start.do• http://www.firstinmath.com/• http://www.corestandards.org/Math
Suggested Time Frame:
2 Days

Domain: 1.MD – Measurement & Data	
Cluster: 1.MD.A – Measure lengths indirectly and by iterating length units.	
Standard: 1.MD.A.1	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How do you order objects by length? • How can you compare lengths of three objects to put them in order? 	<p>Students will:</p> <ul style="list-style-type: none"> • Order three objects by length; compare the lengths of two objects indirectly by using a third object.
Standards: 1.MD.A.1, 1.MD.A.2	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input checked="" type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Order objects by length. • Use the Transitivity Principle to measure indirectly. 	
Instructional Strategies	
<ul style="list-style-type: none"> • Cut strips of paper or straws in different lengths. Have children close their eyes and give each child a chance to identify by feel which of two strips of paper or straws they think is shorter and which is longer. Have the child open his or her eyes to check. Encourage 	

volunteers to tell how they compared the lengths.

- Draw a red line, a blue line, and a yellow line on the board so that the yellow line is the longest and the blue line is the shortest. Which is longer, the red line or the blue line? How does the length of the yellow line compare to the length of the red line? How would you put the lines in order from shortest to longest?

Resources

- Refer to Go Math! Lesson(s): 9.1, 9.2
- Refer to Go Math! Teacher Edition and Student Edition page(s): 369A–369B, 369–372, 373A–373B, 373–376 (Note: *Pages only in Teacher Edition are italics*)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

2 Days

Domain: 1. MD – Measurement & Data	
Cluster: 1.MD.A – Measure lengths indirectly and by iterating length units.	
Standard: 1.MD.A.2	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How do you measure length using nonstandard units? • How do you use a nonstandard measuring tool to measure length? • How can acting it out help you solve measurement problems? 	<p>Students will:</p> <ul style="list-style-type: none"> • 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. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.
Standards: 1.NBT.C.4 , 1.NBT.C.5, 1.NBT.C.6	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration

Student Learning Targets/Objectives
<ul style="list-style-type: none"> • Measure length using nonstandard units. • Make a nonstandard measuring tool to measure length. • Solve measurement problems using the strategy act it out.
Instructional Strategies
<ul style="list-style-type: none"> • Have the class work in groups, and give each group a classroom object, such as a pen or a paintbrush. Have children look in the classroom for an object that is longer or shorter than the first object. After five minutes, reassemble the class. Invite groups to show their objects and explain how they know which object is longer or shorter. • Ask children the following question. How can you use your pencil as a unit of measure? Have children use their pencils to measure the lengths of their desktop, a bookshelf, and a board. Ask children to share their measurements, and discuss similarities and differences. Why are some measurements different even though everyone used a pencil? • Have children draw three lines using three different colors. Then have them measure and label each line. Which of your lines is the longest? What are two ways you can tell which line is the longest?
Resources
<ul style="list-style-type: none"> • Refer to Go Math! Lesson(s): 9.3, 9.4, 9.5 • Refer to Go Math! Teacher Edition and Student Edition page(s): 377A–377B, 377–380, 381A–381B, 381–384, 385A–385B, 385–387 (Note: Pages only in Teacher Edition are <i>italics</i>) • Go Math! Animated Math Models (via Think Central) • HMH Mega Math (via Think Central) • Go Math! iTools (via Think Central) • Go Math! eGlossary (via Think Central) • Go Math! Destination Math (via Student Edition in Think Central) • Corresponding Go Math! Grab and Go for Activities/Literature/Games • Corresponding Go Math! Daily Routines • https://www-k6.thinkcentral.com/ePC/start.do • http://www.firstinmath.com/ • http://www.corestandards.org/Math
Suggested Time Frame:
3 Days

Domain: 1.MD – Measurement & Data	
Cluster: 1.MD.B – Tell and write time.	
Standard: 1.MD.B.3	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How do you tell time to the hour on a clock that has only an hour hand? • How do you tell time to the half hour on a clock that has only an hour hand? • How are the minute hand and hour hand different for time to the hour and time to the half hour? • How do you know whether to draw and write time to the hour or half hour? 	<p>Students will:</p> <ul style="list-style-type: none"> • Tell and write time in hours and half-hours using analog and digital clocks.
Standards: 1.MD.B.3	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration

Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Write times to the hour shown on analog clocks. • Write times to the half hour shown on analog clocks. • Tell times to the hour and half hour using analog and digital clocks. • Use the hour hand to draw and write times on analog and digital clocks. 	
Instructional Strategies	
<ul style="list-style-type: none"> • Write numbers in order from 1 to 12 on the board. How are the numbers ordered? Which number is just before 9? Just after 4? Between 10 and 12? • Show 9:00 on a demonstration clock. Ask a volunteer to read the time. How do you know the clock shows 9:00? How would you show 1:00? • Show 8:00 on a demonstration analog clock. What time does the clock show? How can you move the hour hand to show half past 8:00? Invite a volunteer to move the hour hand to show half past 8:00. • Review telling time to the hour and half hour with children. Show times to the half hour and have children write them on their MathBoards/paper. Repeat showing different times to the hour. 	
Resources	
<ul style="list-style-type: none"> • Refer to Go Math! Lesson(s): 9.6, 9.7, 9.8, 9.9 • Refer to Go Math! Teacher Edition and Student Edition page(s): <i>389A–389B, 389–392, 393A–393B, 393–396, 397A–397B, 397–400, 401A–401B, 401–404</i> (Note: <i>Pages only in Teacher Edition are italics</i>) • Go Math! Animated Math Models (via Think Central) • HMH Mega Math (via Think Central) • Go Math! iTools (via Think Central) • Go Math! eGlossary (via Think Central) • Go Math! Destination Math (via Student Edition in Think Central) • Corresponding Go Math! Grab and Go for Activities/Literature/Games • Corresponding Go Math! Daily Routines • https://www-k6.thinkcentral.com/ePC/start.do • http://www.firstinmath.com/ • http://www.corestandards.org/Math 	
Suggested Time Frame:	
4 Days	

Domain: 1.MD – Measurement & Data	
Cluster: 1.MD.C – Represent and interpret data.	
Standard: 1.MD.C.4	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • What do the pictures in a picture graph show? • How do you make a picture graph to answer a question? • How can you read a bar graph to find the number that a bar shows? • How does a bar graph help you compare information? • How do you count the tallies on a tally chart? • Why is a tally chart a good way to show information that you have collected? • How can showing information in a graph help you solve problems? 	<p>Students will:</p> <ul style="list-style-type: none"> • 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.
Standards: 1.MD.C.4	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication

<input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Analyze and compare data shown in a picture graph where each symbol represents one. • Make a picture graph where each symbol represents one and interpret the information. • Analyze and compare data shown in a bar graph. • Make a bar graph and interpret the information. • Analyze and compare data shown in a tally chart. • Make a tally chart and interpret the information. • Solve problem situations using the strategy make a graph. 	
Instructional Strategies	
<ul style="list-style-type: none"> • Use counters and randomly set up 10 red at the top of your desk and 8 yellow at the bottom. Can you tell which group of marbles has more? Explain. Now organize the marbles into lines. Now is it easier to tell which group has more? Explain. • Ask children the following question, and have them come to the board to show examples. Discuss their responses. Can the same group ever be labeled as both more and fewer? Explain. • Show children a red 3-cube train and a blue 5-cube train. Make sure the cube trains are aligned at one end. Which is longer? Which is shorter? To check their answers, have children count the number of cubes in each cube train. Repeat several times, comparing two cube trains of different lengths. Explain to children that in today's lesson they will read graphs by comparing lengths of colored bars. • Display a picture graph from lesson 10.1 or 10.2, and work with children to translate the same data to a bar graph. Ask volunteers to help label and complete the bar graph. Do you think it is easier to compare data in the picture graph or the bar graph? Explain. • Ask children the following questions to find out what they know about reading tally marks. What number is shown with 3 marks? What number is shown with 4 marks that have another mark slashed across the group? How do you count a group of slashed tally marks and another 2 marks? If children need additional experiences reading tally marks, you might provide them with the numbers 1 to 20 represented in tallies. Have them write each number. • Ask the following questions to find out what children know about drawing tally marks. How do you show the number 4 with tally marks? How do you show the number 7 with tally marks? If children need additional experiences writing tally marks, you might have them write the numbers 1 to 20 down the left side of a paper and draw tally marks on the right side to represent each number. 	
Resources	
<ul style="list-style-type: none"> • Refer to Go Math! Lesson(s): 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7 • Refer to Go Math! Teacher Edition and Student Edition page(s): 413A–413B, 413–416, 417A–417B, 417–420, 421A–421B, 421–424, 425A–425B, 425–427, 429A–429B, 429– 	

432, 433A–433B, 433–436, 437A–437B, 437–440 (Note: Pages only in Teacher Edition are italics)

- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

7 Days

Domain: 1.G – Geometry	
Cluster: 1.G.A – Reason with shapes and their attributes.	
Standard: 1.G.A.1	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How can you identify and describe three-dimensional shapes? • How can you combine three-dimensional shapes to make new shapes? • How can you use attributes to sort two-dimensional shapes? • What attributes can you use to describe two-dimensional shapes? 	<p>Students will:</p> <ul style="list-style-type: none"> • 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.
Standards: 1.G.A.1, 1.G.A.2, 1.G.A.3	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input checked="" type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Identify and describe three-dimensional shapes according to defining attributes. • Identify two-dimensional shapes on three-dimensional shapes. 	

- Use defining attributes to sort shapes.
- Describe attributes of two-dimensional shapes.

Instructional Strategies

- Make a class list of toys found in a toy store. Have children name their favorite toys. Have volunteers describe the shape of their favorite toy while classmates guess which toy is being described. Then present riddles like the following. I am a round toy. I can bounce. You can roll me. What am I? I am flat all over. You can stack me to build a tower. What am I?
- Label and display the three-dimensional shapes. Then invite children to solve shape riddles. They can record their answers on their MathBoards/papers. I have 6 flat surfaces. Each flat surface is a square. I have no curved surfaces. What am I? Repeat with similar riddles to review each shape's defining attributes.
- Review the attributes of triangles and rectangles. Remind children of the terms vertex and side to describe two-dimensional shapes. On the board draw a triangle and an open three-sided shape. Which is a triangle? Why? Tell children that the open shape is not a triangle because although it does have 3 sides, a triangle should be closed. Repeat the activity with a rectangle and an open four-sided shape.
- Play a game of "Simon Says" to review sides and vertices. Give each child a two-dimensional shape, and have children place the shapes where you can see them. Give directions such as Simon says...Put your hands on your head if your shape has 4 vertices. Stand on one foot if your shape has 4 sides the same length. Touch your nose if your shape has curves.

Resources

- Refer to Go Math! Lesson(s): 11.1, 11.5, 12.1, 12.2
- Refer to Go Math! Teacher Edition and Student Edition page(s): 457A–457B, 457–460, 473A–473B, 473–476, 485A–485B, 485–488, 489A–489B, 489–492 (Note: Pages only in Teacher Edition are italics)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

4 Days

Domain: 1. G – Geometry	
Cluster: 1.G.A – Reason with shapes and their attributes.	
Standard: 1.G.A.2	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How can you combine three-dimensional shapes to make new shapes? • How can you use a combined shape to build new shapes? • How can acting it out help you take apart combined shapes? • How can you put two-dimensional shapes together to make new two-dimensional shapes? • How can you combine two-dimensional shapes to make new shapes? • How can acting it out help you make new shapes from combined shapes? • How can you find shapes in other shapes? • How can you take apart two-dimensional shapes? 	<p>Students will:</p> <ul style="list-style-type: none"> • 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.
Standards: 1.G.A.1 , 1.G.A.2, 1.G.A.3	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c

21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	
<ul style="list-style-type: none"> • Compose a new shape by combining three-dimensional shapes. • Use composite three-dimensional shapes to build new shapes. • Identify three-dimensional shapes used to build a composite shape using the strategy act it out. • Use objects to compose new two-dimensional shapes. • Compose a new shape by combining two-dimensional shapes. • Make new shapes from composite two-dimensional shapes using the strategy act it out. • Decompose combined shapes into shapes. • Decompose two-dimensional shapes into parts. 	
Instructional Strategies	
<ul style="list-style-type: none"> • Label and display the three-dimensional shapes. Then invite children to solve shape riddles. They can record their answers on their MathBoards/papers. I have 6 flat surfaces. Each flat surface is a square. I have no curved surfaces. What am I? Repeat with similar riddles to review each shape's defining attributes. • Have children combine two shapes. Suppose you choose a cube and a cylinder. What are the different ways you can combine the two shapes? • Have children use shapes to make a castle or another kind of building. What shapes did you use in your building? • Review two-dimensional shapes with the class. On the board, draw a circle, square, rectangle, and triangle. Have children identify and name each shape. Then ask volunteers to draw the same shape next to each of your drawings. • Distribute cutouts of two-dimensional shapes to children. Have them describe each shape and identify its attributes. Then have children practice tracing each cutout. • Read this problem to children. Tyler put two shapes together to make a square. Which shapes did he use? What can you do to solve this problem? Have children use cutouts of the shapes to solve the problem. Guide children to identify two right triangles as two shapes Tyler could use to make a square. How do you know your answer is reasonable? • Give children an assortment of pattern blocks. Then present the following problem. Chris has some pattern blocks. They have 10 sides in all. None of the blocks is a square. Which blocks could Chris have? Challenge children to use pattern blocks to find as many 	

combinations as possible. List them on the board as children describe them. Invite volunteers to share their problem-solving strategies.

Resources

- Refer to Go Math! Lesson(s): 11.2, 11.3, 11.4, 12.3, 12.4, 12.5, 12.6, 12.7
- Refer to Go Math! Teacher Edition and Student Edition page(s): 461A–461B, 461–464, 465A–465B, 465–467, 469A–469B, 469–472, 493A–493B, 493–496, 497A–497B, 497–500, 501A–501B, 501–503, 505A–505B, 505–508, 509A–509B, 509–512 (Note: *Pages only in Teacher Edition are italics*)
- Go Math! Animated Math Models (via Think Central)
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- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
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- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

8 Days

Domain: 1. G – Geometry	
Cluster: 1.G.A – Reason with shapes and their attributes.	
Standard: 1.G.A.3	
Essential Questions:	Enduring Understandings:
<ul style="list-style-type: none"> • How can you identify equal and unequal parts in two-dimensional shapes? • How can a shape be separated into two equal shares? • How can a shape be separated into four equal shares? 	<p>Students will:</p> <ul style="list-style-type: none"> • 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.
Standards: 1.G.A.1 , 1.G.A.2, 1.G.A.3	
Technology Standard(s)	Interdisciplinary Standard(s)
<ul style="list-style-type: none"> • 8.1.P.A.1-6 • 8.1.P.B.1 • 8.1.P.C.1-2 • 8.1.P.E.1 • 8.1.P.F.1 	<ul style="list-style-type: none"> • Mathematical Practices <ul style="list-style-type: none"> ○ CCSS.Math.Practice.MP1-8 • Science <ul style="list-style-type: none"> ○ 5.1.P.A.1 ○ 5.1.P.B.1-3 ○ 5.1.P.C.1 ○ 5.1.P.D.1 • Social Studies <ul style="list-style-type: none"> ○ 6.1.P.A.1-3 ○ 6.1.P.B.1-2 ○ 6.1.P.D.1-4 • Literacy <ul style="list-style-type: none"> ○ CCSS.ELA-Literacy.SL.1.1-1.3 ○ CCSS.ELA-Literacy.SL.1.4-1.6 ○ CCSS.ELA-Literacy.RF.1.1-1.4c
21st Century Themes: (Check all that apply)	21st Century Skills:
<input checked="" type="checkbox"/> Global Awareness <input type="checkbox"/> Environmental Literacy <input type="checkbox"/> Health Literacy <input type="checkbox"/> Civic Literacy <input checked="" type="checkbox"/> Financial, Economic, Business, and Entrepreneurial Literacy	<input checked="" type="checkbox"/> Creativity and Innovation <input checked="" type="checkbox"/> Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Collaboration
Student Learning Targets/Objectives	

- Identify equal and unequal parts (or shares) in two-dimensional shapes.
- Partition circles and rectangles into two equal shares.
- Partition circles and rectangles into four equal shares.

Instructional Strategies

- Remind children that they can draw lines to show parts of a shape. Draw a circle on the board. Invite a volunteer to draw a line to show two parts. Then draw a trapezoid, and invite a different volunteer to draw a line to show two triangles. Finally, draw a rectangle, and have a new volunteer draw a line to show two squares. Reinforce that the lines drawn show parts of the shapes.
- Draw four pairs of large rectangles on the board. Have four children each divide one rectangle into two equal parts and the other rectangle into two unequal parts. Discuss each pair of drawings. Which drawing shows equal parts? How do you know? How do you know that the other drawing shows unequal parts?

Resources

- Refer to Go Math! Lesson(s): 12.8, 12.9, 12.10
- Refer to Go Math! Teacher Edition and Student Edition page(s): 513A–513B, 513–516, 517A–517B, 517–520, 521A–521B, 521–524 (Note: *Pages only in Teacher Edition are italics*)
- Go Math! Animated Math Models (via Think Central)
- HMH Mega Math (via Think Central)
- Go Math! iTools (via Think Central)
- Go Math! eGlossary (via Think Central)
- Go Math! Destination Math (via Student Edition in Think Central)
- Corresponding Go Math! Grab and Go for Activities/Literature/Games
- Corresponding Go Math! Daily Routines
- <https://www-k6.thinkcentral.com/ePC/start.do>
- <http://www.firstinmath.com/>
- <http://www.corestandards.org/Math>

Suggested Time Frame:

3 Days