

# First Grade: Math Curriculum

Unit 1: Addition Concepts	Time: September	Standards:
<p><b>Essential Questions</b></p> <ul style="list-style-type: none"><li>• How do pictures show adding to?</li><li>• How do you model adding to a group?</li><li>• How do you model putting together?</li><li>• How do you solve addition problems by making a model?</li><li>• What happens when you add zero to a number?</li><li>• Why can you add addends in any order?</li><li>• How can you show all the ways to make a number?</li><li>• Why are some addition facts easy to add?</li></ul>	<p><b>Enduring Understandings</b></p> <ul style="list-style-type: none"><li>• I can use pictures to “add to” and find sums.</li><li>• I can use objects to solve “adding to” and “putting together” addition problems.</li><li>• I can solve adding to and putting together by making a model.</li><li>• I know that when I add with zero, the sum is the same as the addend.</li><li>• I know that I can change the order of addends and get the same sum.</li><li>• I can model or write all the ways to make ten.</li><li>• I can quickly add numbers to ten.</li></ul>	<p><b>Standards:</b></p> <p>1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>1.OA.B.3 Apply properties as strategies to add and subtract. <i>Examples: If <math>8+3=11</math> is known, then <math>3+8=11</math> is also known. (Commutative property of addition.) To add <math>2+6+4=2+10=12</math>. (Associative property of addition.) {Students need not use formal terms for these properties}</i></p> <p>1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., <math>8+6=8+2+4=10+4=14</math>); decomposing a number leading to a ten (e.g., <math>13-4=13-3-1=10-1=9</math>); using the relationship between addition and subtraction (e.g., knowing that <math>8+4=12</math>, one knows <math>12-8=4</math>); and creating equivalent but easier or known sums (e.g., adding <math>6+7</math> by creating the known equivalent <math>6+6+1=12+1+13</math>).</p>
<p><b>Benchmark Assessment(s)</b></p> <ul style="list-style-type: none"><li>➤ SWBAT use pictures or snap cubes to solve addition word problems. Read aloud the problems below to solve. Have students use pictures or snap cubes to solve. Students will record correct answer on their whiteboards. Susie has 3 marbles and Matt gives her 4 more. How many marbles does Susie have? Record incorrect answers. Repeat with-Cora found 8 pennies in her pocket. Leonie gave her 2 more. How many pennies does Cora have altogether? Students should be able to solve two out of two problems correctly. Tally incorrect answers for individual students. 1.OA.A.1</li><li>➤ SWBAT use dominoes to show adding zero. In whole group, show a dominoes (one at a time) <math>6+0</math>, <math>2+0</math>, <math>9+0</math>, <math>1+0</math> with zero to the class. Students will record the answer on their slate. Tally incorrect answers for individual students. Students will answer three out of four correctly. 1.OA.B.3</li><li>➤ SWBAT use colored snap cubes and dominoes to model the commutative property of addition. Orally recite addition number model. Ask students to use snap cubes/dominoes to model the number model. Record on whiteboard. Now ask them to demonstrate the turn-around fact. (<math>6+2</math>, <math>4+1</math>, <math>3+2</math>, <math>4+5</math>, <math>7+3</math>) Tally incorrect answers for individual students. Students should answer four out of five correctly. 1.OA.B.3</li><li>➤ SWBAT add twelve number sentences with nine out of twelve correct. In student journal pg 57 direct students to complete numbers 5-16. This will be done independently.</li></ul>	<p><b>Other Assessments</b></p> <ul style="list-style-type: none"><li>✓ Mid chapter check</li><li>✓ Chapter Review</li><li>✓ End of chapter test</li><li>✓ Quick Check</li><li>✓ Show What You Know-background knowledge check</li></ul> <p><b>Materials</b></p> <ul style="list-style-type: none"><li>• Chapter 1 math journals</li><li>• Snap cubes</li><li>• Dominoes</li><li>• Counters</li><li>• Flash cards</li><li>• Dry erase boards</li><li>• Smart board</li></ul>	

# First Grade: Math Curriculum

## SUGGESTED ACTIVITIES

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMathiTools; counters
- GoMath Activity card 3-Sum Sentences
- GoMath Activity card 7-Back and Forth
- GoMath Activity card (purple) 3-How Many Ways?
- Addition bingo
- Workmat 7 (ten-frame) and number cards to show different numbers
- Problem of the Day
- Fluency Builder
- Use a “Bar Model” TM pg 31A
- Grab and Go Math Literature books-“Join Us”, “Busy Bugs”
- Snap cube Addition (tm 43B)
- Top It Addition
- Quiz Quiz Trade
- Color by Sum, tm58
- Domino “Sum” sort
- Ten Penny Plate math game
- Books; What’s New at the Zoo, One is a Snail Ten is a Crab, The Mission of Addition, Quack and Count, Animals on Board, Domino Addition, 365 Penguins, Math for All Seasons, The 512 Ants on Sullivan St.

### REINFORCEMENT

- Reteach 1.1 to 1.8
- Personal Math Trainer
- Review “Show What You Know” activity at the beginning of each chapter
- Tier 1 or 2 Activity online
- Individual Assistance
- Practice in centers with a partner

### ENRICHMENT

- GoMath Advanced Learners Activity
- GoMath Enrich (in Chapter Resources)

### Suggested Websites

- [abcmouse.com](http://abcmouse.com)
- [abcya.com](http://abcya.com)
- [shephardsoftware.com](http://shephardsoftware.com)
- <http://www.education.com/games/first-grade/math/>
- <http://www.mathgametime.com/games/alien-addition>
- <http://www.funbrain.com>
- <https://www.mathabc.com/math-1st-grade>
- <https://www.mathabc.com/>

### Suggested Materials

- Addition bingo
- Grab and Go games

### Cross-Curricular Connections

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

**SEL:** Develop, implement and model effective problem solving and critical thinking skills.

**Language Arts, Science or Social Studies:** SL1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

# First Grade: Math Curriculum

Unit 2: Subtraction Concepts		Time: October	Standards:
<b>Essential Questions</b> <ul style="list-style-type: none"><li>• How can you show taking from with pictures?</li><li>• How do you model taking from a group?</li><li>• How do you model taking apart?</li><li>• How do you solve subtraction problems by making a model?</li><li>• How can you use pictures and models to compare and subtract?</li><li>• What happens when you subtract zero from a number?</li><li>• How can you show ways to take apart a number?</li><li>• Why are some subtraction facts easy to subtract?</li></ul>	<b>Enduring Understandings</b> <ul style="list-style-type: none"><li>• I can use pictures to show “taking from” and find differences.</li><li>• I can use objects to solve “taking from” and “taking apart” subtraction problems.</li><li>• I can make a model to solve taking from and taking apart subtraction problems.</li><li>• I can look at picture groups to help me understand subtraction.</li><li>• I can model and compare groups of objects to show subtraction.</li><li>• I can figure out how many are left when I subtract zero.</li><li>• I can use objects to show ways to take ten apart and write the number models.</li><li>• I know how to subtract quickly within ten.</li></ul>	<p>1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., <math>8+6=8+2+4=10+4=14</math>); decomposing a number leading to a ten (e.g., <math>13-4=13-3-1=10-1=9</math>); using the relationship between addition and subtraction (e.g., knowing that <math>8+4=12</math>, one knows <math>12-8=4</math>); and creating equivalent but easier or known sums (e.g., adding <math>6+7</math> by creating the known equivalent <math>6+6+1=12+1+13</math>)</p> <p>1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations <math>8+?=11</math>, <math>5+?-3</math>, <math>6+6=?</math>.</p>	
<b>Benchmark Assessment(s)</b> <ul style="list-style-type: none"><li>➤ SWBAT solve subtraction word problems using pictures and snap cubes to show taking from, taking apart, taking from a group, and making a model. Give students snap cubes before beginning the test. Have students complete the Chapter 2 test. Numbers 1,2,3,5,6,9 on Chapter 2 Test will be recorded as the benchmark. Students must complete four out of six correctly. 1.OA.A.1</li><li>➤ SWBAT subtract zero from a number and record on slate. As a whole class, teacher will recite (one at a time) 7-0, 10-0, 5-0, 2-0,11-0, 19-0. Students will record answer on their slate. Keep a tally of incorrect answers. Students should answer four out of six correctly. 1.OA.D.8</li><li>➤ SWBAT show ways to “take apart” ten using snap cubes. Distribute ten snap cubes to each student. Record in student journal pg 113 the ways to make ten. Students should find seven out of eleven ways to make ten. 1.OA.A.1</li><li>➤ SWBAT subtract twelve number sentences with nine out of twelve correct. In student journal pg 119 direct students to complete numbers 5-12. This will be done independently. 1.OA.A.6</li></ul>	<b>Other Assessments</b> <ul style="list-style-type: none"><li>✓ Personal Math Trainer</li><li>✓ Show What You Know-background knowledge check</li><li>✓ Mid chapter check</li><li>✓ Chapter Review</li><li>✓ End of chapter test</li><li>✓ Quick Check</li></ul>	<b>Materials</b> <ul style="list-style-type: none"><li>• Chapter 2 math journals</li><li>• Snap cubes</li><li>• Counters</li><li>• Dry erase boards</li><li>• Smart board</li></ul>	

# First Grade: Math Curriculum

## SUGGESTED ACTIVITIES

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMathiTools; counters
- GoMath Activity card 9 (blue,orange)-Picture this, Subtract
- GoMath Activity card 5 (orange)-Apples Away
- GoMath Activity card 5 (blue)-Runaway Squares
- Subtraction bingo
- Workmat 7 (ten-frame) and number cards to show different numbers
- Problem of the Day(beginning of each lesson)
- Fluency Builder(beginning of each lesson)
- Game-Subtraction Slide, tm 84, student journal pg 68
- Use “Bar Model” tm 87A
- Grab and Go Math Literature books-“The Class Party”, “Milk for Sale”
- Snap cube Subtraction (tm 111)
- Top It Subtraction
- Quiz Quiz Trade
- Color by difference
- Domino “Difference” sort
- Ten Penny Plate math game
- Dice subtraction
- Play “Slide the Beads” tm 85 (Social Studies)
- Play “Is This Correct” example on TM 108
- Subtract zero-Extend the Math Activity, TM 109
- Books-The Monster Musical Chairs, Elevator Magic, Minus Sign, Shark Swimathon, Ten Sly Piranhas, The Action of Subtraction, Subtraction Action

### REINFORCEMENT

- Reteach 2.1 to 2.9
- Personal Math Trainer
- Review “Show What You Know” activity at the beginning of each chapter
- Tier 1 or 2 Activity online
- Individual Assistance
- Practice in centers with a partner

### ENRICHMENT

- GoMath Advanced Learners Activity
- GoMath Enrich (in Chapter Resources)

### Suggested Websites

- abcmouse.com
- abcya.com
- shephardsoftware.com
- <http://www.education.com/games/first-grade/math/>
- <http://www.mathgametime.com/games/alien-addition>
- <http://www.funbrain.com>

### Suggested Materials

- Subtraction bingo
- Grab and Go games
- Dice
- Bar Model blackline master
- Math Activity Cards; blue-5,9 and orange-5,9
- Subtraction slide game-journal pg 68

# First Grade: Math Curriculum

- <https://www.mathabc.com/math-1st-grade>
- <https://www.mathabc.com/>
- Grab and Go books-“The Class Party”, “Milk for Sale”
- *Dominoes*
- GoMath Activity card 9 (blue,orange)-Picture this, Subtract
- GoMath Activity card 5 (orange)-Apples Away
- GoMath Activity card 5 (blue)-Runaway Squares

## **Cross-Curricular Connections**

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

**SEL:** Develop, implement and model effective problem solving and critical thinking skills.

**Language Arts, Science or Social Studies:** SL1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

# First Grade: Math Curriculum

Unit 3: Addition Strategies		Time: November	Standards:
<b>Essential Questions</b> <ul style="list-style-type: none"><li>• What happens when you change the order of the addends when you add?</li><li>• How can you count on one, two, or three?</li><li>• How can you use double facts to find other sums?</li><li>• What strategies can you use to solve addition fact problems?</li><li>• How can you use a ten frame to add ten and some more?</li><li>• How do you use the make a ten strategy to add?</li><li>• How can you group numbers to add three addends?</li><li>• How do you solve addition word problems by drawing a picture?</li></ul>	<b>Enduring Understandings</b> <ul style="list-style-type: none"><li>• I can change the order of the addends when I add.</li><li>• I can use count on one, two, or three as a strategy to find sums of 20.</li><li>• I can use doubles plus one and doubles minus one to find sums to 20.</li><li>• I can use count on, doubles, and doubles plus and minus one to practice adding to 20.</li><li>• I can use a ten frame when I add ten and another number less than 10.</li><li>• I can use make a ten strategy with sums less than twenty.</li><li>• I can add the addends in any order to find the sum.</li><li>• I can group numbers together when I add three addends.</li><li>• I can draw pictures to solve addition problems.</li></ul>	<p>1.OA.B.3 Apply properties as strategies to add and subtract. <i>Examples: If <math>8+3=11</math> is known, then <math>3+8=11</math> is also known. (Commutative property of addition.) To add <math>2+6+4=2+10=12</math>. (Associative property of addition.)</i> {Students need not use formal terms for these properties}</p> <p>1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20 e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such a counting on; making ten (e.g., <math>8+6=8+2+4=10+4=14</math>); decomposing a number leading to a ten (e.g., <math>13-4=13-3-1=10-1=9</math>); using the relationship between addition and subtraction (e.g., knowing that <math>8+4=12</math>, one knows <math>12-8=4</math>); and creating equivalent but easier or known sums (e.g., adding <math>6+7</math> by creating the known equivalent <math>6+6+1=12+1+3</math>).</p> <p>1.OA.C.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).</p>	
<b>Benchmark Assessment(s)</b> <ul style="list-style-type: none"><li>➤ SWBAT use dominoes to change the order of the addends and write the number model to go with it. Teacher should display a domino to the whole class (4,3). Have students write the number model to go with it. The turn the domino around and have students write the number model for that on white board. Repeat with (5,2; 3,1; 6,4). Keep a tally for incorrect answers. Students will be able to score three out of four given problems. 1.OA.B.3</li><li>➤ SWBAT count on one, two, or three when adding in a “Guess My Number” game activity. As a class, display the number on the board. Ask, If I add one to my number-15, guess my number? Students will record answer on exit slip. (16); Ask if I add three to my number-11, guess my number. Students will record answer on exit slip (14); Ask, if I add two to my number-9, guess my number. Students will record answer on exit slip (11) Students must answer two of the three correctly. 1.OA.C.5</li></ul>		<b>Other Assessments</b> <ul style="list-style-type: none"><li>✓ Personal Math Trainer</li><li>✓ Show What You Know-background knowledge check</li><li>✓ Mid chapter check</li><li>✓ Chapter Review</li><li>✓ End of chapter test</li><li>✓ Quick Check</li></ul> <b>Materials</b> <ul style="list-style-type: none"><li>• Snap cubes</li><li>• Whiteboard</li><li>• Ten frame</li><li>• Dominoes</li><li>• Student journals</li></ul>	

# First Grade: Math Curriculum

- SWBAT use snap cubes to add doubles, doubles plus and minus one. In student journal pg 162, give students snap cube to model and do numbers 5a and 5b. Students should build and record responses to the four questions. They must answer two of the three correctly. 1.OA.C.6
- SWBAT use a ten frame to add numbers with a sum of more than ten. Students will use their journals pg 180 to make a ten and then add. There are four parts to these problems and must do three parts correctly. 1.OA.C.6
- SWBAT draw a picture to solve addition problem with three addends and write the equation to go with it. Students will draw pictures for the problems 4,5 on Tm 199. Students should group the addends to solve the problem. There are four parts and students must complete three of the four parts correctly.1.OA.A.2

## SUGGESTED ACTIVITIES

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMathiTools; counters
- GoMath Activity card 7 (blue)-Back and Forth
- GoMath Activity card 7 (orange)-Double Trouble
- GoMath Activity card 16 (orange)-Make a Ten to Add
- Addition bingo
- Workmat 7 (ten-frame) Center and number model cards to add;  $10+3$ ,  $10+7$  etc
- Problem of the Day(beginning of each lesson)
- Fluency Builder(beginning of each lesson)
- Game-Ducky Sums, tm 130, student journal pg 130
- Game-Neighborhood Sums, tm 176
- Grab and Go Math Literature books-“Join Us”, “Doubles Fun on the Farm”, “Funny Bunny Hats”
- Concentration Center (vocabulary match) tm 130A
- Egg Carton Addition in centers-small group-Use for two addends and three addends; numbers are labeled (addends) inside egg carton, shake carton with marbles in it. Add the numbers together wherever the marble lands. (two addends use two marbles, three addends use three marbles) Write the number model on teacher made worksheet.
- Flash cards in centers

## REINFORCEMENT

- Reteach Resources 3.1 to 3.12
- Personal Math Trainer
- RTI Tier 1 and 2 Activity online
- Review “Show What You Know” activity at the beginning of each chapter
- Individual Assistance
- Practice in centers with a partner

## ENRICHMENT

- GoMath Advanced Learners Activity
- GoMath Enrich (in Chapter Resources)

# First Grade: Math Curriculum

- SWBAT use dominoes to change the order of the addends and write the number model to go with it. 1.OA.B.3 – Show students a large domino. Ask them to write the number model on their white board. Then ask students to write the turn around fact. Repeat with a new domino.
- SWBAT count on one, two, or three when adding in a “Guess My Number” game activity. 1.OA.C.5 Whole class-pick a number from the “bag”. Spin the spinner. If the spinner lands on one, add one to the number and write it on whiteboard. Repeat until you do plus one, plus two, plus three.
- How many stripes on the flag-display the American Flag on large screen. Have students turn and talk to discuss how to solve. Write the number model on whiteboard. Tm 135 (Social Studies)
- Build with snap cubes to show doubles and write number model on whiteboard
- Have children work with a partner to look through books or magazines for pictures that show doubles-write number model on whiteboard.
- Number cube subtraction (tm 149B)
- Domino Addition-play with a partner, choose a domino, recite the number model, partner checks and repeat.
- Write a number sentence to match the ten frame model (ex. Tm pg 172)
- Make a ten to solve-use counters (ex. Tm pg 175)
- Books; What’s New at the Zoo, One is a Snail Ten is a Crab, The Mission of Addition, Quack and Count, Animals on Board, Domino Addition, 365 Penguins, Math for All Seasons, The 512 Ants on Sullivan St.

## Suggested Websites

- <http://www.education.com/games/first-grade/math/>
- <http://www.mathgametime.com/games/alien-addition>
- <http://www.funbrain.com>
- [abcmouse.com](http://www.abcmouse.com)
- [abcya.com](http://www.abcya.com)
- [shephardsoftware.com](http://www.shephardsoftware.com)
- <https://www.mathabc.com/math-1st-grade>
- <https://www.mathabc.com/>

## Suggested Materials

- Addition bingo
- Snap cubes or counters
- Smartboard
- Dominoes
- Game-Ducky Sums, tm 130, student journal pg 130
- Game-Neighborhood Sums, tm 176
- Grab and Go Math Literature books-“Join Us”, “Doubles Fun on the Farm”, “Funny Bunny Hats”
- Concentration Center (vocabulary match) tm 130A
- Egg cartons and marbles
- Domino addition

## Cross-Curricular Connections

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

**SEL:** Develop, implement and model effective problem solving and critical thinking skills.

**Language Arts, Science or Social Studies:** W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.



# First Grade: Math Curriculum

Unit 4: Subtraction Strategies		Time: December	Standards:
<b>Essential Questions</b> <ul style="list-style-type: none"><li>• How can you count back one, two, or three to subtract?</li><li>• How can you use an addition fact to find the answer to a subtraction fact?</li><li>• How do you break apart a number to make ten in order to subtract?</li><li>• How can acting out a problem help you solve it?</li></ul>	<b>Enduring Understandings</b> <ul style="list-style-type: none"><li>• I can count back one, two or three to subtract.</li><li>• I can use addition to help me subtract.</li><li>• I can subtract by breaking apart to make a ten.</li><li>• I can do subtraction problems by acting it out.</li></ul>	<p>1.OA.B.4 Understand subtraction as an unknown-addend problem. For ex. Subtract 10-8 by finding the number that makes ten when added to 8.</p> <p>1.OA.C.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).</p> <p>1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such a counting on; making ten (e.g., <math>8+6=8+2+4=10+4=14</math>); decomposing a number leading to a ten (e.g., <math>13-4=13-3-1=10-1=9</math>); using the relationship between addition and subtraction (e.g., knowing that <math>8+4=12</math>, one knows <math>12-8=4</math>); and creating equivalent but easier or known sums (e.g., adding <math>6+7</math> by creating the known equivalent <math>6+6+1=12+1+13</math>).</p> <p>1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p>	
<b>Benchmark Assessment(s)</b> <ul style="list-style-type: none"><li>➤ SWBAT use the count back strategy to subtract. On tm 241B have students complete the problem of the day. Do one at a time and have them record answers on dry erase board. Keep a tally of incorrect answers. They must answer 7 out of 10 correctly. 1.OA.C.5</li><li>➤ SWBAT use addition facts in order to subtract. Use Chapter 4 Test, numbers 2,3,7. Students must answer two out of three correctly. 1.OA.B.4</li><li>➤ SWBAT use the “break apart” strategy to subtract within 20.This needs to be done in steps. You will need a tens mat and counters with teacher made worksheet. Write on the board and Recite the problem 14-5. Direct students to break apart 5 (4-1) in order to make a ten (subtracted from 14) and record (<math>14-4=10</math>). Then do step two- (<math>10-1=9</math>). Students should be able to complete these steps and record; <math>14-4-1=9</math> or <math>14-4=10</math> and <math>10-1=9</math>. 1OA.A.1</li><li>➤ SWBAT use the “acting it out” strategy to subtract. On Chapter 4 test, number 11; read the subtraction number story to the class. Have students draw a picture to help solve. Then have them record how drawing a picture helped them solve the problem. Repeat with a new problem. This can be done on the back of the test-Recite; Susie had 13 pennies in her pocket. She dropped 6. How many pennies does Susie have left? Students must draw a picture and then</li></ul>	<b>Other Assessments</b> <ul style="list-style-type: none"><li>✓ Personal Math Trainer</li><li>✓ Show What You Know-background knowledge check</li><li>✓ Mid chapter check</li><li>✓ Chapter Review</li><li>✓ End of chapter test</li><li>✓ Quick Check</li><li>✓ Exit Slip</li></ul>	<b>Materials</b> <ul style="list-style-type: none"><li>• Snap cubes</li><li>• Whiteboard</li><li>• Ten frame</li><li>• Chapter 4 Test</li><li>• Dominoes</li><li>• Teacher made worksheet for break apart 14-5</li></ul>	

# First Grade: Math Curriculum

explain how the picture helped them. Each question has two parts, for a total of four parts. When correcting the test, students must score 3 out of 4 on these two questions. 1.OA.A.1

## SUGGESTED ACTIVITIES

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMathiTools; counters
- GoMath Activity card 5 (purple)-Plus and Minus
- GoMath Activity card 5 (orange)-Apples Away
- GoMath Activity card 5,9 (blue)-Runaway Squares, Picture This
- Addition/subtraction bingo
- Workmat 7 (ten-frame) - practice take apart with partner
- Problem of the Day(beginning of each lesson)
- Fluency Builder(beginning of each lesson)
- Game-Under the Sea, tm 214
- Grab and Go Math Literature books-“Math Club”, “Miss bumble’s Garden”, “The Class Party”
- Books-The Monster Musical Chairs, Elevator Magic, Minus Sign, Shark Swimathon, Ten Sly Piranhas, The Action of Subtraction, Subtraction Action

## REINFORCEMENT

- Reteach Resources 4.1 to 4.6
- Personal Math Trainer
- RTI Tier 1 and 2 Activity online
- Review “Show What You Know” activity at the beginning of each chapter
- Individual Assistance
- Practice in centers with a partner

## ENRICHMENT

- GoMath Advanced Learners Activity
- GoMath Enrich (in Chapter Resources)

### Suggested Websites

- <http://www.education.com/games/first-grade/math/>
- <http://www.mathgametime.com/games/alien-addition>
- <http://www.funbrain.com>
- abcmouse.com
- abcya.com
- shephardsoftware.com
- <https://www.mathabc.com/math-1st-grade>
- <https://www.mathabc.com/>

### Suggested Materials

- Activity Cards
- Ten frame mat
- Addition/Subtraction Bingo
- GoMath Activity card 5 (purple)-Plus and Minus
- GoMath Activity card 5 (orange)-Apples Away
- GoMath Activity card 5,9 (blue)-Runaway Squares, Picture This

### Cross-Curricular Connections

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

**SEL:** Develop, implement and model effective problem solving and critical thinking skills.

**Language Arts, Science or Social Studies:** W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

# First Grade: Math Curriculum

Unit 5: Addition/Subtraction Relationships		Time: December-January	Standards:
<b>Essential Questions</b> <ul style="list-style-type: none"><li>• How can you use addition to check subtraction?</li><li>• How can you use a related fact to find an unknown number?</li><li>• How do you choose when to add and when to subtract to solve a problem?</li><li>• How can you add and subtract in different ways to make the same number?</li><li>• How can you decide if a number sentence is true or false?</li></ul>	<b>Enduring Understandings</b> <ul style="list-style-type: none"><li>• I can use fact families to help me with subtraction.</li><li>• I can use fact families to find an answer I don't know.</li><li>• I can figure out if I should add or subtract.</li><li>• I can name different ways to make a number by adding or subtracting.</li><li>• I can figure out if a number sentence is true or false.</li></ul>	<p>1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such a counting on; making ten (e.g., <math>8+6=8+2+4=10+4=14</math>); decomposing a number leading to a ten (e.g., <math>13-4=13-3-1=10-1=9</math>); using the relationship between addition and subtraction (e.g., knowing that <math>8+4=12</math>, one knows <math>12-8=4</math>); and creating equivalent but easier or known sums (e.g., adding <math>6+7</math> by creating the known equivalent <math>6+6+1=12+1+13</math>).</p> <p>1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations <math>8+?=11</math>, <math>5+\square-3</math>, <math>6+6=\square</math>.</i></p> <p>1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>1.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <i>For example, which of the following equations are true and which are false? <math>6=6</math>, <math>7=8-1</math>, <math>5+2=2+5</math>, <math>4+1=5+2</math>.</i></p>	
<b>Benchmark Assessment(s)</b> <ul style="list-style-type: none"><li>➤ SWBAT use addition to check subtraction by completing the mid chapter 5 checkpoint in student journal pg.276, numbers 1,2,4. Students must complete two out of three problems correctly. 1.OA.C.6</li><li>➤ SWBAT find an unknown number using a related fact by using a fact triangle. In student journal pg 286, students complete the fact triangles (numbers 3,4,5,6) to help them find the unknown number. They should complete three out of four correctly. 1.OA.D.8</li><li>➤ SWBAT complete two word problems to decide which operation to use on the Chapter 5 Review Test, numbers 4,7,10. They must complete two out of three. 1.OA.A.1</li><li>➤ SWBAT show and record four ways to make the number 12 and five ways to make the number 10. In a center activity provide students with counters/snap cubes. Use materials to show different ways to make 12. On a teacher made worksheet students record number sentences to represent models made (minimum of four). Ex <math>4+8</math>, <math>6+6</math>, <math>12-0</math>, <math>5+5+2</math> etc Repeat with the number 10. 1.OA.C.6</li></ul>	<b>Other Assessments</b> <ul style="list-style-type: none"><li>✓ Personal Math Trainer</li><li>✓ Show What You Know-background knowledge check</li><li>✓ Mid chapter check</li><li>✓ Chapter Review</li><li>✓ End of chapter test</li></ul>		
	<b>Materials</b> <ul style="list-style-type: none"><li>• Snap cubes</li><li>• Two colored counters</li><li>• Whiteboard</li><li>• Ten frame</li><li>• Chapter 5 Test</li><li>• Dominoes</li><li>• Exit Slip</li></ul>		

# First Grade: Math Curriculum

- SWBAT decide if a number sentence is true or false by completing number nine on the Chapter 5 Test. There are three parts to this question and students must answer two of the three correctly. 1.OA.D7

- Student math journal

## SUGGESTED ACTIVITIES

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMathiTools; counters
- GoMath Activity card 11,18,16 (purple)-Problem Solving, Number Tales, The Sum is the Same
- GoMath Activity card 11 (orange)-Face Facts
- GoMath Activity card 18,11 (blue)-The Missing Piece, Any Way you Cut It
- Addition/subtraction bingo
- Workmat 7 (ten-frame) -
- Problem of the Day(beginning of each lesson)
- Fluency Builder(beginning of each lesson)
- Game-Related Fact Race tm 264
- Game-Basic Facts Race tm 306
- Grab and Go Math Literature books-“Picture Puzzles”, “Juggling”
- Make a Match vocabulary game-tm 254A
- Center partner practice with “Is it True” number models
- Center partner practice with “How many ways to make a number?”
- Center partner practice adding, subtracting, find the missing number with Fact triangles

## REINFORCEMENT

- Reteach Resources 5.1 to 5.10
- Personal Math Trainer
- RTI Tier 1 and 2 Activity online
- Review “Show What You Know” activity at the beginning of each chapter
- Individual Assistance
- Practice in centers with a partner

## ENRICHMENT

- Advanced learners; tm p.256-students search through magazines for pictures of objects. Glue pictures on paper and write a number sentence to go with it.
- GoMath Advanced Learners Activity
- GoMath Enrich (in Chapter Resources)

### Suggested Websites

- <http://www.education.com/games/first-grade/math/>
- <http://www.mathgametime.com/games/alien-addition>
- <http://www.funbrain.com>
- abcmouse.com
- abcya.com
- shephardsoftware.com
- <https://www.mathabc.com/math-1st-grade>
- <https://www.mathabc.com/>
- Brain Pop Jr.
- Discovery Ed

### Suggested Materials

- Ten frame mat
- Addition/Subtraction Bingo
- Fact triangles
- Is it True center
- How many ways to make a number center
- Game-Related Fact Race tm 264
- Game-Basic Facts Race tm 306
- GoMath Activity card 11,18,16 (purple)-Problem Solving, Number Tales, The Sum is the Same
- GoMath Activity card 11 (orange)-Face Facts
- GoMath Activity card 18,11 (blue)-The Missing Piece, Any Way you Cut It

### Cross-Curricular Connections

SEL: Develop, implement and model effective problem solving and critical thinking skills.

# First Grade: Math Curriculum

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

*Language Arts, Science or Social Studies:* W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

## Unit 6: Count and Model Numbers

Time: January

### Standards:

#### Essential Questions

- How can you show numbers to 100 as tens and ones?
- How can you model, read, and write numbers to 120?

#### Enduring Understandings

- I can group objects to show number to 100 as tens and ones.
- I can read, write, and model number to 120.

1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:

- 10 can be thought of as a bundle of ten ones- called a “ten”.
- The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- 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).

1.NBT.A.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

#### Benchmark Assessment(s)

- SWBAT show numbers to 100 as tens and ones using longs and cubes. Students will need place value mat and longs/cubes. Call out a number and have students show the number with longs and cubes. You will be giving them six numbers. They should complete five out of six correctly. Keep a tally of incorrect answers. The numbers to recite: 12, 21, 36, 50, 75, 100. This can be done after the chapter test. 1.NBT.B.2
- SWBAT model, read, and write numbers to 120 when completing the Chapter 6 Test, numbers 1,2,9,10. When collecting the test from each student, ask them to read the numbers from - 1,2,9,10. 1.NBT.A.1

#### Other Assessments

- ✓ Personal Math Trainer
- ✓ Show What You Know-background knowledge check
- ✓ Mid chapter check
- ✓ Chapter Review
- ✓ End of chapter test

#### Materials

- Longs and cubes
- Place value mat
- Chapter 6 Test

### SUGGESTED ACTIVITIES

# First Grade: Math Curriculum

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMath iTools; counters
- GoMath Activity card 14 (purple)-Ten and up
- GoMath Activity card 14 (orange)-Teen Time
- GoMath Activity card 14 (blue)-Groups of Ten
- Problem of the Day(beginning of each lesson)
- Fluency Builder(beginning of each lesson)
- Game-Show the Numbers tm 330
- Game-Puddle Hopping tm 340
- Game-Tens and Ones Race tm 364
- Grab and Go Math Literature books-“Join Us”, “Strawberries”
- Make a Match vocabulary game-tm 329
- Center partner practice with “Build this Number” with longs and cubes
- Center partner practice with “What number am i?” Count longs and cubes and partner check
- 100<sup>th</sup> Day project
- 100<sup>th</sup> Day snack
- Pictures of tens –tm327l (art project)
- Play “I have who has” with place value cards
- Daily count of days in school-place value

## REINFORCEMENT

- Reteach Resources
- Personal Math Trainer
- RTI Tier 1 and 2 Activity online
- Review “Show What You Know” activity at the beginning of each chapter
- Individual Assistance
- Practice in centers with a partner

## ENRICHMENT

- GoMath Advanced Learners Activity
- GoMath Enrich (in Chapter Resources)

### Suggested Websites

- <http://www.education.com/games/first-grade/math/>
- <http://www.mathgametime.com/games/alien-addition>
- <http://www.funbrain.com>
- abcmouse.com
- abcya.com
- shephardsoftware.com
- <https://www.mathabc.com/math-1st-grade>
- <https://www.mathabc.com/>

### Suggested Materials

- Vocabulary match cards
- GoMath Activity card 14 (purple)-Ten and up
- GoMath Activity card 14 (orange)-Teen Time
- GoMath Activity card 14 (blue)-Groups of Ten
- Game-Show the Numbers tm 330
- Game-Puddle Hopping tm 340
- Game-Tens and Ones Race tm 364

### Cross-Curricular Connections

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

**SEL:** Develop, implement and model effective problem solving and critical thinking skills.

# First Grade: Math Curriculum

**Language Arts, Science or Social Studies:** W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

Unit 7: Compare Numbers		Time: January/February	Standards:
<p><b>Essential Questions</b></p> <ul style="list-style-type: none"> <li>• How can you use symbols to show how numbers compare?</li> <li>• How can you identify numbers that are 10 less or 10 more than a number?</li> </ul>	<p><b>Enduring Understandings</b></p> <ul style="list-style-type: none"> <li>• I can use symbols to show greater than, less than or equal.</li> <li>• I can identify numbers that are 10 more or 10 less than a number.</li> </ul>		<p>1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols <math>&gt;</math>, <math>=</math>, and <math>&lt;</math>.</p> <p>1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</p>
<p><b>Benchmark Assessment(s)</b></p> <ul style="list-style-type: none"> <li>➤ SWBAT compare numbers using symbols to represent greater than, less than, or equal to on the Mid Chapter Checkpoint, journal pg 414; numbers 1,2,4. Students should complete two of three correctly. NBT.B.3</li> <li>➤ SWBAT write and draw numbers that are 10 more/10 less than a number on Chapter Test Seven numbers 5,9. There are five parts and students should score four out of five correctly. 1.NBT.C.5</li> </ul>			<p><b>Other Assessments</b></p> <ul style="list-style-type: none"> <li>✓ Personal Math Trainer</li> <li>✓ Show What You Know-background knowledge check</li> <li>✓ Mid chapter check</li> <li>✓ Chapter Review</li> <li>✓ End of chapter test</li> <li>✓ Exit Slip</li> </ul>
			<p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• Math journals</li> <li>• Chapter 7 Math Test</li> </ul>
<b>SUGGESTED ACTIVITIES</b>			

# First Grade: Math Curriculum

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMathiTools; counters
- GoMath Activity card 4 (orange)-20 Through 50
- Problem of the Day(beginning of each lesson)
- Fluency Builder(beginning of each lesson)
- Game-Rainy Day Bingo tm 398
- Game-The Greater Game tm 402
- Game-Rainy Day Fun tm 408
- Grab and Go Math Literature books-“Name that Number”, “Strawberries”
- Guess the Word-vocab tm 398A
- Math top it (two digit numbers-more/less)
- Center partner practice with “Build this Number” with longs and cubes and another number... which is larger? How can you tell, then ten more and ten less
- Center partner practice with “What number am i?” Ten more, ten less Count longs and cubes and partner check
- Pictures of tens –tm327I (art project)-what number is ten larger? Ten smaller?
- Play “I have who has” with place value cards-ten more, ten less
- Daily count of days in school-place value-ten more, ten less
- Number grid-guess my number (ten more, ten less
- “Equal, Not Equal” tm 395G
- More or Fewer tm 395G
- Math Top It

## REINFORCEMENT

- Reteach 7.1 to 7.5
- Personal Math Trainer
- RTI Tier 1 and 2 Activity
- Partner practice in centers
- One on one assistance

## ENRICHMENT

- GoMath Advanced Learners Activity
- GoMath Enrich (in Chapter Resources)

## Suggested Websites

- <http://www.education.com/games/first-grade/math/>
- <http://www.mathgametime.com/games/alien-addition>
- <http://www.funbrain.com>
- abcmouse.com
- abcya.com
- shephardsoftware.com
- <https://www.mathabc.com/math-1st-grade>
- <https://www.mathabc.com/>

## Suggested Materials

- Game-Rainy Day Bingo tm 398
- Game-The Greater Game tm 402
- Game-Rainy Day Fun tm 408
- GoMath Activity card 4 (orange)-20 Through 50
- *Longs and cubes*
- *Math journal*
- *Number grid*
- *I have who has place value (ten more, ten less)*

## Cross-Curricular Connections



# First Grade: Math Curriculum

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

**SEL:** Develop, implement and model effective problem solving and critical thinking skills.

**Language Arts, Science or Social Studies:** W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

Unit 8: Two Digit Addition and Subtraction		Time: February/March	Standards:
<p><b>Essential Questions</b></p> <ul style="list-style-type: none"> <li>• How can you subtract tens?</li> <li>• How can you use a hundred chart and model to help you add two-digit numbers?</li> <li>• How can drawing a picture help you explain how to solve an addition problem?</li> <li>• How can you use a hundred chart to show the relationship between addition and subtraction?</li> </ul>	<p><b>Enduring Understandings</b></p> <ul style="list-style-type: none"> <li>• I can draw a model to subtract tens.</li> <li>• I can use a hundred chart or use a model to add numbers.</li> <li>• I can draw a picture to help me figure out an addition problem.</li> <li>• I can use a hundred chart to add and subtract.</li> </ul>	<p>1.NBT.C.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p> <p>1.NBT.C.4 Add within 100, including a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base tens blocks) 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.</p>	
<p><b>Benchmark Assessment(s)</b></p> <ul style="list-style-type: none"> <li>➤ SWBAT draw a model to subtract tens in student journal pg 452, numbers 9,10,11. There are eight parts and students should complete six of the eight correctly. 1.NBT.C.6</li> <li>➤ SWBAT use a hundred chart and model when adding two-digit number on the Chapter 8 test, numbers 4,5,7. There are four part; students should complete three of the four parts correctly. 1.NBT.C.4</li> <li>➤ SWBAT explain how a picture helped to solve an addition problem. After taking the Chapter 8 test, display number seven on the board. Have students turn and talk about how they solved. Teacher should circulate and check for understanding of</li> </ul>		<p><b>Other Assessments</b></p> <ul style="list-style-type: none"> <li>✓ Personal Math Trainer</li> <li>✓ Show What You Know-background knowledge check</li> <li>✓ Mid chapter check</li> <li>✓ Chapter Review</li> <li>✓ End of chapter test</li> </ul>	
		<p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• Student math journal</li> <li>• Hundred charts</li> </ul>	

# First Grade: Math Curriculum

each student. Keep a tally of incorrect answers. There is one part for this and students need to answer it correctly. 1.NBT.C.4

- SWBAT use a hundred chart to show the relationship between adding and subtracting in their student journals, pg 487. Do numbers three through six. There are eight parts and students should answer six out of eight correctly. 1.NBT.C.4

- Chapter 8 Test

## SUGGESTED ACTIVITIES

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMathTools; counters
- GoMath Activity card 20 (purple)-Neat Trick
- GoMath Activity card 20 (orange)-Regroup
- GoMath Activity card 16,14,20 (blue)-Add With Ten, Groups of Ten, Count On
- Addition/subtraction bingo
- Workmat 7 (ten-frame) -
- Problem of the Day(beginning of each lesson)
- Fluency Builder(beginning of each lesson)
- Game-Neighborhood sums tm 436
- Game-Flying Along tm 470
- Game-Basic Facts Race tm 488
- Grab and Go Math Literature books-“Garden Party”, “It’s a Homerun”, ”Party Plans”
- Make a Match vocabulary game-tm 435
- Center partner practice with “Is it True” number models
- Center partner practice-match the math sentence tm 488
- Fact triangles

### REINFORCEMENT

- Reteach 8.1 to 8.10
- Personal Math Trainer
- RTI Tier 1 Activity (online)
- Center practice with partner
- One on one assistance

### ENRICHMENT

- GoMath Advanced Learners Activity
- GoMath Enrich (in Chapter Resources)

### Suggested Websites

- <http://www.education.com/games/first-grade/math/>
- <http://www.mathgametime.com/games/alien-addition>

### Suggested Materials

- Ten frame,
- GoMath Activity card 20 (purple)-Neat Trick

# First Grade: Math Curriculum

- <http://www.funbrain.com>
- abcmouse.com
- abcya.com
- shephardsoftware.com
- <https://www.mathabc.com/math-1st-grade>
- <https://www.mathabc.com/>
- GoMath Activity card 20 (orange)-Regroup
- GoMath Activity card 16,14,20 (blue)-Add With Ten, Groups of Ten, Count On
- Addition/subtraction bingo
- Game-Neighborhood sums tm 436
- Game-Flying Along tm 470
- Game-Basic Facts Race tm 488
- Grab and Go Math Literature books-“Garden Party”, “It’s a Homerun”, ”Party Plans”
- Make a Match vocabulary game-tm 435
- Center partner practice with “Is it True” number models
- Center partner practice-match the math sentence tm 488
- Fact triangless

## Cross-Curricular Connections

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

**SEL:** Develop, implement and model effective problem solving and critical thinking skills.

**Language Arts, Science or Social Studies:** W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

# First Grade: Math Curriculum

Unit 9: Measurement	Time: March	Standards:
<p><b>Essential Questions</b></p> <ul style="list-style-type: none"><li>• How can you compare lengths of three objects to put them in order?</li><li>• How can you measure length using nonstandard units?</li><li>• How do you tell time (and write time) to the hour and the half hour on a clock on using an analog and digital clock?</li></ul>	<p><b>Enduring Understandings</b></p> <ul style="list-style-type: none"><li>• I can put them in order from longest to shortest or shortest to longest.</li><li>• I can use square tiles to measure.</li><li>• I can tell times to the hour and half hour using both kinds of clocks.</li></ul>	<p>1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p> <p>1.MD.A.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <i>Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.</i></p> <p>1.MD.B.3 Tell and write time in hours and half-hours using analog and digital clocks.</p>
<p><b>Benchmark Assessment(s)</b></p> <ul style="list-style-type: none"><li>➤ SWBAT order three objects from shortest to longest. This can be done in the student journal pg 540 (Mid-Chapter Checkpoint), numbers 1,2,3 There are five parts and students should answer four out of five correctly. 1.MD.A.1, 1.MD.A.2</li><li>➤ SWBAT tell and write time to the hour and half hour. In their math journal pg 563 (number 7) ask students to show 10:00 on their own clock. Then draw the hands and write the time for number 7. Repeat with numbers 8,9. There are six parts and students should answer five out of six correctly. 1.MD.B.3</li></ul>		<p><b>Other Assessments</b></p> <ul style="list-style-type: none"><li>✓ Personal Math Trainer</li><li>✓ Show What You Know-background knowledge check</li><li>✓ Mid chapter check</li><li>✓ Chapter Review</li><li>✓ End of chapter test</li><li>✓ Exit slip</li></ul> <p><b>Materials</b></p> <ul style="list-style-type: none"><li>• Tiles</li><li>• Math Journal</li><li>• Small clock for each student</li></ul>

# First Grade: Math Curriculum

## SUGGESTED ACTIVITIES

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMathiTools; counters
- GoMath Activity card 17 (orange)-Half Past
- GoMath Activity card 17 (blue)-On the Hour
- Problem of the Day(beginning of each lesson)
- Fluency Builder(beginning of each lesson)
- Game-Measure Up tm 512
- Game-Going to a Weather Station tm 512 A,B,C
- Game-Story Time tm 552
- Grab and Go Math Literature books-“The Dog Show”, “Treasure Hunts”, ”Time to Play”
- Make a Match vocabulary game-tm 511
- Center partner practice with “Show this time”
- Center partner practice with “What time am i?” read the time and partner will check
- Play “I have who has” with time
- Books-Millions to Measure, Counting on Frank, Super Saturday Sand Castle, Mighty Maddie, Pastry School in Paris, Hershey’s Milk chocolate weights and measures, Me and the Measure of Things, Sam’s Sneaker Squares, Keep You Distance, the Dragon’s Scales, The Best Bug Parade, Math Counts, Length, Weight, Size, Capacity, Room for Ripley, How big is a foot

### REINFORCEMENT

- Reteach 9.1 to 9.9
- Personal Math Trainer
- Review “Show What You Know” activity at the beginning of each chapter
- Tier 1 or 2 Activity online
- Individual Assistance

### ENRICHMENT

- GoMath Advanced Learners Activity
- GoMath Enrich (in Chapter Resources)

### Suggested Materials

- GoMath Activity card 17 (orange)-Half Past
- GoMath Activity card 17 (blue)-On the Hour
- Vocabulary cards
- Game-Measure Up tm 512

# First Grade: Math Curriculum

- I have who has time cards
- Game-Going to a Weather Station tm 512 A,B,C
- Game-Story Time tm 552

## Cross-Curricular Connections

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

**SEL:** Develop, implement and model effective problem solving and critical thinking skills.

**Language Arts, Science or Social Studies:** W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

## Unit 10: Represent Data

Time: April

## Standards:

### Essential Questions

- How can you show information in a graph to help you solve problems?

### Enduring Understandings

- I can solve problems using the strategy- Make a Graph.

1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

### Benchmark Assessment(s)

- SWBAT show information in a graph and interpret data on journal pg 607. Ask all students instead of just ten-Which snack (pretzel, apple, yogurt) do you like the most? Have students collect the data and record on page 607. Then read the questions to them, they should record answers on that same page. There are two extra questions to ask: 1) How many students like pretzels, apples, and yogurt altogether? (record answer at the bottom) 2)How many more like \_\_\_\_\_ than \_\_\_\_\_. This question will vary according to the votes. Record answer at the bottom of the page. There will be a total of ten questions. Students should answer eight of ten correctly.1.MD.C.4

### Other Assessments

- ✓ Personal Math Trainer
- ✓ Show What You Know-background knowledge check
- ✓ Mid chapter check
- ✓ Chapter Review
- ✓ End of chapter test
- ✓ Exit slip

### Materials

- Student journal Ch. 10

# First Grade: Math Curriculum

## SUGGESTED ACTIVITIES

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMathiTools; counters
- GoMath Activity card 6 (purple)-Picture Perfect
- GoMath Activity card 6 (orange)-Tally Ho
- GoMath Activity card 6,8 (blue)-Graph Math, Pass the Bar
- Problem of the Day(beginning of each lesson)
- Fluency Builder(beginning of each lesson)
- Game-Graph Game tm 574
- Grab and Go Math Literature books-“Miss B’s Class Makes Tables and Graphs”, “”
- Make a Match vocabulary game-tm 574A
- Center practice-choose less than 20 pattern blocks and build a shape. Make a graph of the shapes used. Ask your partner questions about the graph; ex. How many squares did you use? How many more triangles thann hexagons did you use?
- Weather graph
- Books-Tally O’Malley, Lemonade for Sale, The Great Graph Contest, Less Than Zero, Tally Cat Keeps Track, The Best Vacation Ever, Family Reunion

## REINFORCEMENT

- Reteach 10.1 to 10.7
- Personal Math Trainer
- Review “Show What You Know” activity at the beginning of each chapter
- Tier 1 or 2 Activity online
- Individual Assistance

## ENRICHMENT

- GoMath Advanced Learners Activity
- GoMath Enrich (in Chapter Resources)

### Suggested Websites

- <http://www.education.com/games/first-grade/math/>
- <http://www.mathgametime.com/games/alien-addition>
- <http://www.funbrain.com>
- [abcmouse.com](http://www.abcmouse.com)

### Suggested Materials

- GoMath Activity card 6(purple)-Picture Perfect
- GoMath Activity card 6 (orange)-Tally Ho
- GoMath Activity card 6,8 (blue)-Graph Math, Pass the Bar
- Game-Graph Game tm 574

# First Grade: Math Curriculum

- [abcya.com](http://abcya.com)
- [shephardsoftware.com](http://shephardsoftware.com)
- <https://www.mathabc.com/math-1st-grade>
- <https://www.mathabc.com/>

- Grab and Go Math Literature books-“Miss B’s Class Makes Tables and Graphs”,
- Vocabulary cards
- Pattern blocks

## Cross-Curricular Connections

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

**SEL:** Develop, implement and model effective problem solving and critical thinking skills.

**Language Arts, Science or Social Studies:** W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

## Unit 11: Three-Dimensional Geometry

Time: May

## Standards:

### Essential Questions

- How can you identify three-dimensional shapes?
- How can you use a combined shape to build new shapes?

### Enduring Understandings

- I can name the three-dimensional shapes by their attributes.
- I can use my smaller combined shape to build something bigger.

1.G.A.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

1.G.A.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

### Benchmark Assessment(s)

- SWBAT identify three-dimensional shapes in a game activity. “What three-dimensional shape am I?” This will be given after the chapter 11 test. Answers will be recorded on the back of the test. There will be four questions and students must answer three of the four correctly. List the names of the three dimensional shapes on the board (cube, sphere, cone, cylinder, rectangular prism) Tell students that you will be describing a shape and they will write the name of the shape on the back of the test. Provide students with a bag of three-dimensional shapes 1.G.A.1
  - 1) I have one flat face and my other surface is curved. What shape am I? Give a choice of; cone or sphere
  - 2) I have two flat faces. Both flat faces are circles. The other surface is curved. What shape am I? give a choice of cylinder or cone
  - 3) I have six flat faces. All of my faces are squares. What shape am I? cube or sphere

### Other Assessments

- ✓ Personal Math Trainer
- ✓ Show What You Know-background knowledge check
- ✓ Mid chapter check
- ✓ Chapter Review
- ✓ End of chapter test
- ✓ Exit Slip

### Materials

- Chapter 11 Test
- Bag of three-dimensional shapes for each student



# First Grade: Math Curriculum

- 4) I don't have any flat faces. My surface is curved. What shape am I? sphere or rectangular prism
- SWBAT use combined shapes to make new shapes. On the Chapter 11 Test, numbers 3,4,8. There are six parts and student should answer five of the six correctly. 1.G.A.2

## SUGGESTED ACTIVITIES

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMathiTools; counters
- GoMath Activity card 11,18,16 (purple)-Problem Solving, Number Tales, The Sum is the Same
- GoMath Activity card 11 (orange)-
- GoMath Activity card 10 (purple)-building blocks
- GoMath Activity card 10 (blue)-On the Corner
- Addition/subtraction bingo
- Workmat 7 (ten-frame) -
- Problem of the Day(beginning of each lesson)
- Fluency Builder(beginning of each lesson)
- Game-Shape Match Bingo tm 632
- Game-On the Water tm 660
- Grab and Go Math Literature books-"April's First Word", "Building a mini Park"
- Going on a Train Trip vocabulary game-tm 632A
- Build with pattern block puzzles
- Build with three-dimensional blocks
- Books-Racing Around, Racing Around hamster Champs, If you were a Quadrilateral, If you were a polygon, Grandfather Tan's Story

## REINFORCEMENT

- Reteach 11.1 to 11.5
- Personal Math Trainer
- Review "Show What You Know" activity at the beginning of each chapter
- Tier 1 or 2 Activity online
- Individual Assistance
- Practice in centers with a partner

## ENRICHMENT

- GoMath Advanced Learners Activity
- GoMath Enrich (in Chapter Resources)

### Suggested Websites

- <http://www.education.com/games/first-grade/math/>
- <http://www.mathgametime.com/games/alien-addition>

### Suggested Materials

- GoMath Activity card 11,18,16 (purple)-Problem Solving, Number Tales, The Sum is the Same

# First Grade: Math Curriculum

- <http://www.funbrain.com>
- abcmouse.com
- abcya.com
- shephardsoftware.com
- <https://www.mathabc.com/math-1st-grade>
- <https://www.mathabc.com/>
- GoMath Activity card 11 (orange)-
- GoMath Activity card 10 (purple)-building blocks
- GoMath Activity card 10 (blue)-On the Corner
- Game-Shape Match Bingo tm 632
- Game-On the Water tm 660
- Grab and Go Math Literature books-“April’s First Word”, “Building a mini Park”
- Going on a Train Trip vocabulary game-tm 632A
- Pattern Blocks
- Three-dimensional blocks

## **Cross-Curricular Connections**

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

**SEL:** Develop, implement and model effective problem solving and critical thinking skills.

**Language Arts, Science or Social Studies:** W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

# First Grade: Math Curriculum

## Unit 12: Two-Dimensional Geometry

Time: June

## Standards:

### Essential Questions

- How can you identify two-dimensional shapes?
- How can you use a combined shape to build new shapes?
- How can a shape be separated into two and four equal shares?

### Enduring Understandings

- I can sort shapes by their attributes.
- I can use my small shape to build a bigger shape.
- I can draw lines in a shape to show two or four equal shares.

1.G.A.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

1.G.A.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

1.G.A.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves*, *fourths*, and *quarters*, and use the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

# First Grade: Math Curriculum

## Benchmark Assessment(s)

- SWBAT identify two-dimensional shapes on the Mid-Chapter Checkpoint tm 698 with Numbers 1,2 . There are four parts and students must answer three of the four correctly. 1.G.A.1
- SWBAT build new shapes with a combined shape on the Chapter 12 Test tm 734B. Do numbers 4,5,6,7 as the benchmark. There are six parts and students will answer five of the six correctly. 1.G.A.2
- SWBAT draw shapes and partition them in halves, fourths. On the back of the test, have students draw a circle. Use a red crayon to divide the circle in half and color one half. Then have students draw another circle. Use a blue crayon to divide the circle in fourths and color one fourth. Last, have students imagine that these circles are their most favorite cookie/dessert. Ask them which piece they would want, the half- red or the quarter- blue and why. 1.G.A.3

## Other Assessments

- ✓ Personal Math Trainer
- ✓ Show What You Know-background knowledge check
- ✓ Mid chapter check
- ✓ Chapter Review
- ✓ End of chapter test
- ✓ Exit Slip

## Materials

- Mid-Chapter Checkpoint tm 698
- Chapter 12 Test tm 734B
- Directions above for the last benchmark

## SUGGESTED ACTIVITIES

- Go Math interactive Student Edition-Essential Questions
- GoMath Person Math Trainer
- GoMath-Math on the Spot Video
- GoMath Animated Math Models
- GoMathiTools; counters
- GoMath Activity card 10 (purple)-Building Blocks
- GoMath Activity card 10 (orange)-More Alike than Not
- GoMath Activity card 10,19 (blue)-On The Corner, Half Math
- What Shape Am I- Bingo game
- Problem of the Day(beginning of each lesson)
- Fluency Builder(beginning of each lesson)
- Game-Rocket Shapes tm 680

## REINFORCEMENT

- Re-Teach resources 12.1-12.10
- Partner practice in centers to identify shapes by attributes
- Work one on one with student
- Personal Math Trainer
- Review “Show What You Know” activity at the beginning of each chapter
- Tier 1 or 2 Activity online
- Individual Assistance

# First Grade: Math Curriculum

- Game-On the Water tm 674
- Grab and Go Math Literature books-“Signs Shape Up”, “”
- Make Vocabulary Builder game-tm 669
- Vocabulary Game-Guess the Word tm 670A
- Center partner practice with “What shape Am I”
- Center partner practice with template-design
- Pattern Block Puzzles
- Search the room for-Ex. Ask students to look for objects in a room that are the shape of a square. Discuss what makes it a square with a partner and then discuss as a class.
- Color by Shape
- Books-Racing Around, Racing Around hamster Champs, If you were a Quadrilateral, If you were a polygon, Grandfather Tan’s Story

## ENRICHMENT

- Enrich resources 12.1-12.10
- Advanced learner Activities listed throughout the chapter

### Suggested Websites

- <http://www.education.com/games/first-grade/math/>
- <http://www.mathgametime.com/games/alien-addition>
- <http://www.funbrain.com>
- abcmouse.com
- abcya.com
- shephardsoftware.com
- <https://www.mathabc.com/math-1st-grade>
- <https://www.mathabc.com/>
- Brain Pop Jr.
- Discovery Ed

### Suggested Materials

- Template
- Attribute Blocks
- Pattern Blocks and puzzles
- Tangrams
- GoMath Activity card 10 (purple)-Building Blocks
- GoMath Activity card 10 (orange)-More Alike than Not
- GoMath Activity card 10,19 (blue)-On The Corner, Half Math
- Game-Rocket Shapes tm 680
- Game-On the Water tm 674
- Grab and Go Math Literature books-“Signs Shape Up”, “”
- Make Vocabulary Builder game-tm 669
- Vocabulary Game-Guess the Word tm 670A

### Cross-Curricular Connections

**21<sup>st</sup> Century Skills:** CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

**Technology:** 8.1.2.A.4. Demonstrate developmentally appropriate navigation skills in virtual environments.

**SEL:** Develop, implement and model effective problem solving and critical thinking skills.

**Language Arts, Science or Social Studies:** W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

# First Grade: Math Curriculum