

# Number Corner Grade 1 Correlations to Common Core State Standards

## Common Core State Standards for Mathematics, Grade 1

In Grade 1, instructional time should focus on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes.

(1) Students develop strategies for adding and subtracting whole numbers based on their prior work with small numbers. They use a variety of models, including discrete objects and length-based models (e.g., cubes connected to form lengths), to model add-to, take-from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition to add whole numbers and to create and use increasingly sophisticated strategies based on these properties (e.g., “making tens”) to solve addition and subtraction problems within 20. By comparing a variety of solution strategies, children build their understanding of the relationship between addition and subtraction.

(2) Students develop, discuss, and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones). Through activities that build number sense, they understand the order of the counting numbers and their relative magnitudes.

(3) Students develop an understanding of the meaning and processes of measurement, including underlying concepts such as iterating (the mental activity of building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement. (Note: Students should apply the principle of transitivity of measurement to make indirect comparisons, but they need not use this technical term.)

(4) Students compose and decompose plane or solid figures (e.g., put two triangles together to make a quadrilateral) and build understanding of part-whole relationships as well as the properties of the original and composite shapes. As they combine shapes, they recognize them from different perspectives and orientations, describe their geometric attributes, and determine how they are alike and different, to develop the background for measurement and for initial understandings of properties such as congruence and symmetry.

## Grade 1 Overview

### Operations & Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Add and subtract within 20.
- Work with addition and subtraction equations.

### Number & Operations in Base Ten

- Extend the counting sequence.
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

### Measurement & Data

- Measure lengths indirectly and by iterating length units.
- Tell and write time.
- Represent and interpret data.

### Geometry

- Reason with shapes and their attributes.

### Mathematical Practices

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

*Taken from the Common Core State Standards for Mathematics 2010, pages 13 & 14.*

# Number Corner Grade 1 Correlations to Common Core State Standards (cont.)

OPERATIONS ALGEBRAIC THINKING 1.OA			
Standard	Number Corner	Supplement	Assessment
<b>Represent and solve problems involving addition and subtraction.</b>			
1.OA.1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.(e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.		Set A9 Number & Operations: Number Puzzles Calendar Pattern	
1.OA.2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20 (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem)	Sept–May Friday’s Figuring Sept Wednesday Challenges 3 & 4 March Monday Challenges 1–3		
<b>Understand and apply properties of operations and the relationship between addition and subtraction.</b>			
1.OA.3. Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.) <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</math>, the second two numbers can be added to make a ten, so <math>2 + 6 + 4 = 2 + 10 = 12</math>. (Associative property of addition.)</i>			
1.OA.4. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.		Set A9 Number & Operations: Number Puzzles Calendar Pattern	
<b>Add and subtract within 20.</b>			
1.OA.5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	February Thursday’s Thinking		<b>Formal</b> Grade 1 Yearlong Skills Interview, Tasks 7, 8
1.OA.6a. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.	Sept Days in School Sept/Oct Monday’s Money Sept–May Friday’s Figuring Oct/Mar/Apr Wed Workout Jan/Feb/Apr Thursday’s Thinking		<b>Formal</b> Number Corner, Assessments 3, 7 Grade 1 Fact Fluency Assessment**

\* Citations for Units 4 and 6 are based on revised Unit Planners found in Supplement Sets A10 and A11 on pages A10.4–A10.6 and A11.3–A11.5 in the CCSS Supplement.

\*\* Grade 1 Picture Problems can be accessed under “Assessment Tools” on the Bridges Support for Grade 1 Teachers page at <http://mathlearningcenter.org/resources/materials/grade-one>

# Number Corner Grade 1 Correlations to Common Core State Standards (cont.)

OPERATIONS ALGEBRAIC THINKING 1.OA			
Standard	Number Corner	Supplement	Assessment
<b>Add and subtract within 20.</b>			
1.OA.6b. 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 $6 + 6 + 1 = 12 + 1 = 13$ ).	Sept Days in School Sept/Oct Monday's Money Oct/Mar/Apr Wednesday's Workout Jan/Feb/Apr Thursday's Thinking	Set A9 Number & Operations: Number Puzzles Calendar Pattern	<b>Informal</b> Number Corner, Assessments 3, 7  <b>Formal</b> Grade 1 Yearlong Skills Interview, Tasks 6, 7, 8
<b>Work with addition and subtraction equations.</b>			
1.OA.7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <i>For example, which of the following equations are true and which are false? <math>6 = 6</math>, <math>7 = 8 - 1</math>, <math>5 + 2 = 2 + 5</math>, <math>4 + 1 = 5 + 2</math>.</i>	Sept Days in School Sept/Oct/Feb Wed Workout Sept–May Friday's Figuring Oct/Mar Monday's Money Jan Thursday's Thinking	Set A9 Number & Operations: Number Puzzles Calendar Pattern	<b>Formal</b> Number Corner, Assessment 3
1.OA.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 + x = 11</math>, <math>5 = x - 3</math>, <math>6 + 6 = x</math></i>	March Wednesday's Workout	Set A9 Number & Operations: Number Puzzles Calendar Pattern	<b>Formal</b> Grade 1 Yearlong Skills Interview, Task 6
NUMBER AND OPERATIONS IN BASE TEN 1.NBT			
Standard	Number Corner	Supplement	Assessment
<b>Extend the Counting Sequence</b>			
1.NBT.1a. Count to 120, starting at any number less than 120.	Sept Days This Month Chart Sept Days in School Sept/Nov/Dec Monday's Money Jan–May Monday's Money Sept/Oct/Nov/Feb/Mar Tuesday's Time, Tally & Temperature Nov/May Wednesday Workouts Nov/Dec/May Thursday's Thinking	Set A1 Number & Operations: Numbers to 120, Activities 1–4	<b>Formal</b> Grade 1 Yearlong Skills Interview, Tasks 1, 3** Grade 1 Yearlong Skills Paper/Pencil Assessment**

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\*\* The Grade 1 Fact Fluency Assessment can be accessed under "Assessment Tools" on the Bridges Support for Grade 1 Teachers page at <http://mathlearningcenter.org/resources/materials/grade-one>

# Number Corner Grade 1 Correlations to Common Core State Standards (cont.)

NUMBER AND OPERATIONS IN BASE TEN 1.NBT			
Standard	Number Corner	Supplement	Assessment
<b>Extend the Counting Sequence</b>			
1.NBT.1b. In this range, read and write numerals and	Sep/Feb/Apr Tuesday's Time, Tally & Temperature Oct/Nov Wed. Workouts Dec/Jan/Mar Monday's Money Dec Thursday's Thinking	Set A1 Number & Operations: Numbers to 120, Activities 1–4	<b>Formal</b> Number Corner Assessments 1, 3–5, 7–10 Grade 1 Yearlong Skills Interview, Task 4** Grade 1 Yearlong Skills Paper/Pencil Assessment**
1.NBT.1c. represent a number of objects with a written numeral.	Nov Wednesday's Workout Dec Thursday's Thinking		<b>Formal</b> Number Corner Assessments 3–5, 7, 8, 10
<b>Understand place value.</b>			
1.NBT.2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:			
1.NBT.2a. 10 can be thought of as a bundle of ten ones — called a “ten.”	Sep/Nov/Dec/Feb Wed. Workout Oct/Mar Thursday's Thinking	Set A1 Number & Operations: Numbers to 120, Activities 1–4	<b>Formal</b> Grade 1 Yearlong Skills Interview, Task 5
1.NBT.2b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.	Oct/Mar Thursday's Thinking Nov/Dec/Feb Wed. Workout	Set A1 Number & Operations: Numbers to 120, Activities 1–4	<b>Formal</b> Number Corner Assessments 2, 4, 10
1.NBT.2c. 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).	Sep/Nov/Dec/Feb Wed Workout Mar Thursday's Thinking	Set A1 Number & Operations: Numbers to 120, Activities 1–4	<b>Formal</b> Grade 1 Yearlong Skills Interview, Task 5**
1.NBT.3a. Compare two two-digit numbers based on meanings of the tens and ones digits,	Oct–Feb Tuesday's Time, Tally & Temperature Dec/Jan/Mar Monday's Money Feb Wednesday's Workout	Set A1 Number & Operations: Numbers to 120, Activities 1–4	<b>Formal</b> Grade 1 Yearlong Skills Paper/Pencil Assessment**
1.NBT.3b. recording the results of comparisons with the symbols $>$ , $=$ , and $<$ .		Set A1 Number & Operations: Numbers to 120, Activities 1–4	
<b>Use place value understanding and properties of operations to add and subtract.</b>			
1.NBT.4a. Add within 100, including adding a two-digit number and a one-digit number,	Nov/Apr Monday's Money Sep–May Friday's Figuring Dec/Feb Wednesday's Workout Mar Thursday's Thinking		<b>Formal</b> Number Corner Assessments 5, 7

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\*\* The Grade 1 Yearlong Skills Interview and Paper/Pencil Assessment can be accessed under “Assessment Tools” on the Bridges Support for Grade 1 Teachers page at <http://mathlearningcenter.org/resources/materials/grade-one>

# Number Corner Grade 1 Correlations to Common Core State Standards (cont.)

NUMBER AND OPERATIONS IN BASE TEN 1.NBT			
Standard	Number Corner	Supplement	Assessment
<b>Use place value understanding and properties of operations to add and subtract.</b>			
1.NBT.4b. 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;	Nov Monday's Money		
1.NBT.4c. relate the strategy to a written method and explain the reasoning used.	Feb Wednesday's Workout Mar Thursday's Thinking		
1.NBT.4d. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	Dec/Feb Wednesday's Workout Mar Thursday's Thinking		<b>Formal</b> Number Corner Assessment 5
1.NBT.5a. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count;	Mar Thursday's Thinking Apr Thursday's Thinking		
1.NBT.5b. explain the reasoning used.	Mar Thursday's Thinking Apr Thursday's Thinking		
1.NBT.6a. 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;	Mar Thursday's Thinking May Thursday's Thinking		
1.NBT.6b. relate the strategy to a written method and explain the reasoning used.	Mar Thursday's Thinking May Thursday's Thinking		

MEASUREMENT AND DATA 1.MD			
Standard	Number Corner	Supplement	Assessment
<b>Measure lengths indirectly and by iterating length units.</b>			
1.MD.1a. Order three objects by length;			
1.MD.1b. compare the lengths of two objects indirectly by using a third object.			

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MEASUREMENT AND DATA 1.MD			
Standard	Number Corner	Supplement	Assessment
<b>Measure lengths indirectly and by iterating length units.</b>			
1.MD.2a. 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;			
1.MD.2b. 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.			
<b>Tell and write time.</b>			
1.MD.3. Tell and write time in hours and half-hours using analog and digital clocks.	Sep–Jan Tuesday’s Time, Tally & Temperature	Set D7 Measurement: Telling Time, Activities 1–3	<b>Formal</b> Number Corner Assessments 3, 6
<b>Represent and interpret data.</b>			
1.MD.4a. Organize, represent, and interpret data with up to three categories;	Sep Thursday’s Thinking	Set E1 Data Analysis: Bar Graphs, Activities 1 & 2	
1.MD.4b. 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.	Sep Thursday’s Thinking	Set E1 Data Analysis: Bar Graphs, Activities 1 & 2	

GEOMETRY 1.G			
Standard	Number Corner	Supplement	Assessment
<b>Reason with shapes and their attributes.</b>			
1.G.1a. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ;		Set C3 Geometry: 2-D Shapes Around Us Calendar Pattern Set C4 Geometry: Symmetry Calendar Pattern Set C5 Geometry: 3-D Shapes Around Us Calendar Pattern Set C6 Geometry: 2-D Shapes Attributes Calendar Pattern Set C7 Geometry: Describing 3-D Shapes Calendar Pattern Set C8 Geometry: Congruent Shapes Calendar Pattern	

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GEOMETRY 1.G			
Standard	Number Corner	Supplement	Assessment
<b>Reason with shapes and their attributes.</b>			
1.G.1b. build and draw shapes to possess defining attributes.		Set C4 Geometry: Symmetry Calendar Pattern Set C6 Geometry: 2-D Shapes Attributes Calendar Pattern Set C8 Geometry: Congruent Shapes Calendar Pattern	
1.G.2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.	Sep Thursday's Thinking Jan Wednesday's Workout	Set C4 Geometry: Symmetry Calendar Pattern	
1.G.3a. Partition circles and rectangles into two and four equal shares,		Set C4 Geometry: Symmetry Calendar Pattern	
1.G.3b. describe the shares using the words halves, fourths, and quarters, and		Set C4 Geometry: Symmetry Calendar Pattern	
1.G.3c. use the phrases half of, fourth of, and quarter of.		Set C4 Geometry: Symmetry Calendar Pattern	
1.G.3d. Describe the whole as two of, or four of the shares.		Set C4 Geometry: Symmetry Calendar Pattern	
1.G.3e. Understand for these examples that decomposing into more equal shares creates smaller shares.		Set C4 Geometry: Symmetry Calendar Pattern	

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