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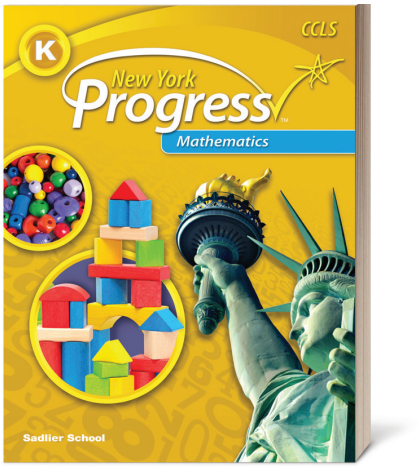
# New York Progress Mathematics

## Standards-Based Instruction & Practice




Aligned to the

# New York State Learning Standards for Mathematics (Revised 2017)

# Kindergarten

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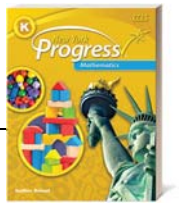


# Counting and Cardinality

| Kindergarten NYS Learning Standards for Mathematics | Sadlier New York Progress Mathematics, Kindergarten | |
|---|---|---|
| **A. Know number names and the count sequence.** | | |
| K.CC.A.1<br>1. Count to 100 by ones and by tens | **Lesson 38** | **Count by Ones and Tens to 100**—pp. 175–178 |
| K.CC.A.2<br>2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1). | **Lesson 38** | **Count by Ones and Tens to 100**—pp. 175–178 |
| K.CC.A.3<br>3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects). | **Lesson 2** | **Count and Write 1 and 2**—pp. 15–18 |
| | **Lesson 4** | **Count and Write 3 and 4**—pp. 23–26 |
| | **Lesson 6** | **Count and Write 0 and 5**—pp. 31–34 |
| | **Lesson 9** | **Count and Write 6 and 7**—pp. 43–46 |
| | **Lesson 11** | **Count and Write 8, 9, and 10**—pp. 51–54 |
| | **Lesson 13** | **Count to Tell How Many**—pp. 59–62 |
| | **Lesson 28** | **Count and Write 11 and 12**—pp. 135–138 |
| | **Lesson 30** | **Count and Write 13 and 14**—pp. 143–146 |
| | **Lesson 32** | **Count and Write 15 and 16**—pp. 151–154 |
| | **Lesson 34** | **Count and Write 17 and 18**—pp. 159–162 |
| | **Lesson 36** | **Count and Write 19 and 20**—pp. 167–170 |
| **B. Count to tell the number of objects.** | | |
| K.CC.B.4<br>4. Understand the relationship between numbers and quantities; connect counting to cardinality. | | |
| K.CC.B.4a<br>4a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. (1:1 correspondence) | **Lesson 1** | **Count and Model 1 and 2**—pp. 11–14 |
| | **Lesson 3** | **Count and Model 3 and 4**—pp. 19–22 |
| | **Lesson 5** | **Count and Model 0 and 5**—pp. 27–30 |
| | **Lesson 8** | **Count and Model 6 and 7**—pp. 39–42 |
| | **Lesson 10** | **Count and Model 8, 9 and 10**—pp. 47–50 |
| | **Lesson 27** | **Count and Model 11 and 12**—pp. 131–134 |
| | **Lesson 29** | **Count and Model 13 and 14**—pp. 139–142 |
| | **Lesson 31** | **Count and Model 15 and 16**—pp. 147–150 |
| | **Lesson 33** | **Count and Model 17 and 18**—pp. 155–158 |
| | **Lesson 35** | **Count and Model 19 and 20**—pp. 163–166 |
| K.CC.B.4b<br>4b. Understand that the last number name said tells the number of objects counted, (cardinality). The number of objects is the same regardless of their arrangement or the order in which they were counted. | | |
| K.CC.B.4c<br>4c. Understand the concept that each successive number name refers to a quantity that is one larger. | | |

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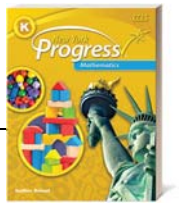


# Counting and Cardinality

| Kindergarten NYS Learning Standards for Mathematics | Sadlier New York Progress Mathematics, Kindergarten |
|---|---|
| K.CC.B.4d<br>4d. Understand the concept of ordinal numbers (first through tenth) to describe the relative position and magnitude of whole numbers. | **Lesson 15** **Ordinal Numbers**—pp. 67–70 |
| K.CC.B.5 | |
| K.CC.B.5a<br>5a. Answer counting questions using as many as 20 objects arranged in a line, a rectangular array, and a circle. Answer counting questions using as many as 10 objects in a scattered configuration.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>e.g., "How many _____ are there?" | **Lesson 2** **Count and Write 1 and 2**—pp. 15–18<br>**Lesson 3** **Count and Model 3 and 4**—pp. 19–22<br>**Lesson 4** **Count and Write 3 and 4**—pp. 23–26<br>**Lesson 5** **Count and Model 0 and 5**—pp. 27–30<br>**Lesson 6** **Count and Write 0 and 5**—pp. 31–34<br>**Lesson 8** **Count and Model 6 and 7**—pp. 39–42<br>**Lesson 9** **Count and Write 6 and 7**—pp. 43–46<br>**Lesson 10** **Count and Model 8, 9 and 10**—pp. 47–50<br>**Lesson 11** **Count and Write 8, 9, and 10**—pp. 51–54<br>**Lesson 12** **Count to Compare**—pp. 55–58<br>**Lesson 13** **Count to Tell How Many**—pp. 59–62<br>**Lesson 27** **Count and Model 11 and 12**—pp. 131–134<br>**Lesson 28** **Count and Write 11 and 12**—pp. 135–138<br>**Lesson 29** **Count and Model 13 and 14**—pp. 139–142<br>**Lesson 30** **Count and Write 13 and 14**—pp. 143–146<br>**Lesson 31** **Count and Model 15 and 16**—pp. 147–150<br>**Lesson 32** **Count and Write 15 and 16**—pp. 151–154<br>**Lesson 33** **Count and Model 17 and 18—**pp. 155–158<br>**Lesson 34** **Count and Write 17 and 18**—pp. 159–162<br>**Lesson 35** **Count and Model 19 and 20**—pp. 163–166<br>**Lesson 36** **Count and Write 19 and 20**—pp. 167–170<br>**Lesson 37** **Make and Break Apart 11 to 19**—pp. 171–174 |
| K.CC.B.5b<br>5b. Given a number from 1–20, count out that many objects. | |
| **C. Compare numbers.** | |
| K.CC.C.6<br>6. Identify whether the number of objects in one group is greater than (more than), less than (fewer than), or equal to (the same as) the number of objects in another group.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>Note: Include groups with up to ten objects.<br>e.g., using matching and counting strategies. | **Lesson 7** **Match to Compare**—pp. 35–38<br>**Lesson 12** **Count to Compare**—pp. 55–58 |

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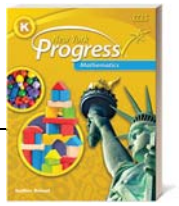


**Kindergarten**

# Counting and Cardinality

| Kindergarten NYS Learning Standards for Mathematics | Sadlier New York Progress Mathematics, Kindergarten |
|---|---|
| K.CC.C.7<br>7. Compare two numbers between 1 and 10 presented as written numerals.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>e.g., 6 is greater than 2. | **Lesson 14** **Compare Numbers**—pp. 63–66 |

# Operations & Algebraic Thinking

| Kindergarten NYS Learning Standards for Mathematics | Sadlier New York Progress Mathematics, Kindergarten |
|---|---|
| **A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.** | |
| K.OA.A.1<br>1. Represent addition and subtraction using objects, fingers, pennies, drawings, sounds, acting out situations, verbal explanations, expressions, equations or other strategies.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>Note: Drawings need not show details, but should show the mathematics in the problem. | **Lesson 16** **Put Together to Add**—pp. 79–82<br>**Lesson 17** **Add to Find How Many**—pp. 83–86<br>**Lesson 19** **Take Away to Subtract**—pp. 91–94<br>**Lesson 20** **Subtract to Find How Many Left**—pp. 95–98 |
| K.OA.A.2 | |
| K.OA.A.2a<br>2a. Add and subtract within 10.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>e.g., using objects or drawings to represent the problem.<br>K.OA.A.2b<br>5b. Solve addition and subtraction word problems within 10.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>e.g., using objects or drawings to represent the problem.<br>In the chart below, *the four unshaded (white) subtypes are expectations in Kindergarten*. Grade 1 and 2 students work with all subtypes. Darker shading indicates the four difficult subtypes that students should work with in Grade 1 but need not master until Grade 2. | **Lesson 18** **Problem Solving: Addition**—pp. 87–90<br>**Lesson 21** **Problem Solving: Subtraction**—pp. 99–102 |

| | Result Unknown | Change Unknown | Start Unknown |
|---|---|---|---|
| Add To | *A* bunnies sat on the grass. *B* more bunnies hopped there. How many bunnies are on the grass now?<br>$A + B = \square$ | *A* bunnies were on the grass. Some more bunnies hopped there. Then there were *C* bunnies. How many bunnies hopped over to the first *A* bunnies?<br>$A + \square = C$ | Some bunnies were sitting on the grass. *B* more bunnies hopped there. Then there were *C* bunnies. How many bunnies were on the grass before?<br>$\square + B = C$ |
| Take From | *C* apples were on the table. I ate *B* apples. How many apples are on the table now?<br>$C - B = \square$ | *C* apples were on the table. I ate some apples. Then there were *A* apples. How many apples did I eat?<br>$C - \square = A$ | Some apples were on the table. I ate *B* apples. Then there were *A* apples. How many apples were on the table before?<br>$\square - B = A$ |

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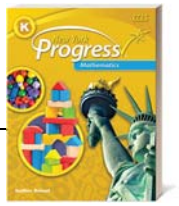


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# Operations & Algebraic Thinking

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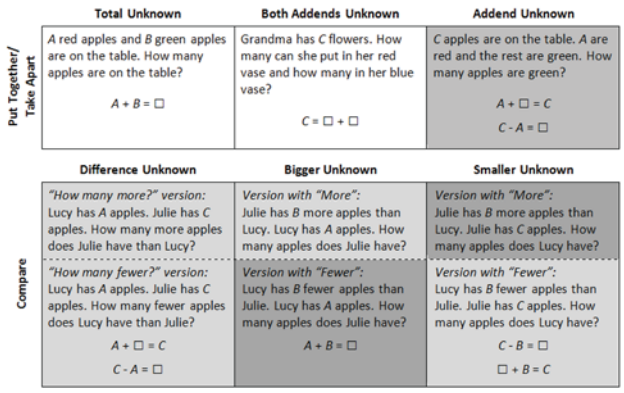
|  | |
| K.OA.A.3<br>3. Decompose numbers less than or equal to 10 into pairs in more than one way.<br>Record each decomposition by a drawing or equation.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>e.g., using objects or drawings.<br>e.g., 5 = 2 + 3 and 5 = 4 + 1, or<br>5<br>2 3 | **Lesson 22** **Break Apart Numbers to 5**—pp. 103–106<br>**Lesson 24** **Break Apart Numbers to 10**—pp. 115–118 |
| K.OA.A.4<br>8. Find the number that makes 10 when given a number from 1 to 9.<br>Record the answer with a drawing or equation.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>e.g., using objects or drawings. | **Lesson 26** **Make Ten**—pp. 119–122 |
| K.OA.A.4<br>4. Fluently add and subtract within 5.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>Note: Fluency involves a mixture of just knowing some answers, knowing some answers from patterns, and knowing some answers from the use of strategies. | **Lesson 23** **Addition: Sums to 5 (Fluency)**—pp. 107–110<br>**Lesson 24** **Subtract: From 5 or Less (Fluency)**—pp. 111–114 |
| **B. Understand simple patterns.** | |
| K.OA.B.6<br>5. Duplicate, extend, and create simple patterns using concrete objects. | *Related content*—<br>**Lesson 38** **Count by Ones and Tens to 100** (hundred chart, counting by 10 patterns)—pp. 175–178 |

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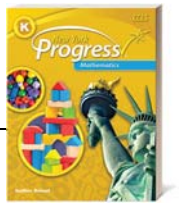


# Number & Operations in Base Ten

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|---|---|
| **A. Work with numbers 11–19 to gain foundations for place value.** | |
| K.NBT.A.1<br>1. Compose and decompose the numbers from 11 to 19 into ten ones and one, two, three, four, five, six, seven, eight, or nine ones.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>e.g., using objects or drawings. | **Lesson 37** **Make and Break Apart 11 to 19**—pp. 171–174 |

# Measurement & Data

| Kindergarten NYS Learning Standards for Mathematics | Sadlier New York Progress Mathematics, Kindergarten |
|---|---|
| **A. Describe and compare measurable attributes.** | |
| K.MD.A.1<br>1. Describe measurable attributes of an object(s), such as length or weight, using appropriate vocabulary.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>e.g., small, big, short, tall, empty, full, heavy, and light. | **Lesson 39** **Describe Measurements**—pp. 187–190 |
| K.MD.A.2<br>2. Directly compare two objects with a common measurable attribute and describe the difference. | **Lesson 40** **Compare Measurements**—pp. 191–194 |
| **B. Classify objects and count the number of objects in each category.** | |
| K.MD.B.3<br>3. Classify objects into given categories; count the objects in each category and sort the categories by count.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>Note: Limit category counts to be less than or equal to 10. | **Lesson 41** **Sort and Count**—pp. 195–198 |
| K.MD.B.4<br>4. Explore coins (pennies, nickels, dimes, and quarters) and begin identifying pennies and dimes. | *Grade 1*<br>**Lesson 21** **Money**—pp. 186–193 |

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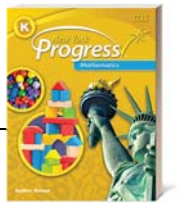


# Geometry

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|---|---|
| **A. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).** | |
| K.G.A.1<br>1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above, below, beside, in front of, behind,* and *next to*. | **Lesson 48** **Above, Below, Beside, Next To**—pp. 231–234<br>**Lesson 49** **In Front of, Behind**—pp. 235–238 |
| K.G.A.2<br>2. Name shapes regardless of their orientation or overall size. | **Lesson 42** **Circles and Triangles**—pp. 207–210<br>**Lesson 43** **Squares, Rectangles, and Hexagons**—pp. 211–214<br>**Lesson 45** **Solid Shapes**—pp. 219–222 |
| K.G.A.3<br>3. Understand the difference between two-dimensional (lying in a plane, "flat") and three-dimensional ("solid") shapes. | **Lesson 47** **Identify Flat and Solid Shapes**—pp. 227–230 |
| **B. Analyze, compare, create, and compose shapes.** | |
| K.G.B.4<br>4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts, and other attributes.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>e.g., number of sides and vertices/"corners", or having sides of equal length. | **Lesson 44** **Compare Flat Shapes**—pp. 215–218<br>**Lesson 46** **Compare Solid Shapes**—pp. 223–226 |
| K.G.B.5<br>5. Model objects in their environment by building and/or drawing shapes.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>e.g., using blocks to build a simple representation in the classroom.<br>Note on and/or: Students should be taught to model objects by building and drawing shapes; however, when answering a question, students can choose to model the object by building or drawing the shape. | **Lesson 50** **Building Shapes**—pp. 239–242 |
| K.G.A.3<br>6. Compose larger shapes from simple shapes.<br>ADDITIONAL CLARIFICATION/EXAMPLES<br>e.g., join two triangles to make a rectangle. | **Lesson 51** **Building Larger Shapes**—pp. 243–246 |

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