Summer Scholars and Common Core Math Standards Rising lst Grade

| Day | Lesson | Primary Mathematics Standards | Standards for Mathematical Practice |
| :---: | :---: | :---: | :---: |
| Day 1 | Lesson 1 | K.CC.A. 1 Count to 100 by ones and by tens. <br> K.CC.A.B.4.a 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. | Reason abstractly and quantitatively. |
| Day 2 |  |  |  |
| Day 3 | Lesson 2 | K.cC.A. 1 Count to 100 by ones and by tens. <br> K.CC.A.B.4.a 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. | Use appropriate tools strategically. |
| Day 4 |  |  |  |
| Day 5 | Lesson 3 | K.CC.A. 2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1 ). <br> K.CC.B.4.b Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. were counted. | Construct viable arguments and critique the reasoning of others. |
| Day 6 |  |  |  |
| Day 7 | Lesson 4 | K.CC.B.4.c Understand that each successive number name refers to a quantity that is one larger. | Look for and express regularity in repeated reasoning. |
| Day 8 |  |  |  |
| Day 9 | Lesson 5 | K.CC.D. 6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies | Reason abstractly and quantitatively. |
| Day 10 |  |  |  |
| Day 11 | Lesson 6 |  | Reason abstractly and quantitatively. |
| Day 12 |  |  |  |
| Day 13 | Lesson 7 |  <br> subtract within 10 , e.g., by using objects or drawings to represent the problem | Reason abstractly and quantitatively. |
| Day 14 |  |  |  |
| Day 15 | Lesson 8 | K.OA.A. 2 Solve addition and subtraction word problems, and add and subtract within 10 , e.g., by using objects or drawings to represent the problem | Use appropriate tools strategically. |
| Day 16 |  |  |  |
| Day 17 | Lesson 9 | K.OA.A. 3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g. by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5=2+3$ and $5=4+1$ ). | Look for and make use of structure. |
| Day 18 |  |  |  |
| Day 19 | Lesson 10 | K.NBT.A. 1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18=10+8$ ); understand that these numbers are composed of tenones and one, two, three, four, five, six, seven, eight, or nine ones | Construct viable arguments and critique the reasoning of others |
| Day 20 |  |  |  |
| Day 21 | Lesson 11 | K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.9., by using objects or drawings, and record each compostion or decomposition by a drawing or equation (e.g.s., $18=10+8$ ), understand that these umbers are composed of tenones and one, two, thre, four, five, six, seven, eight, or nine ones | Look for and express regularity in repeated reasoning. |
| Day 22 |  |  |  |
| Day 23 | Lesson 12 | K.MD.B. 3 K.MD.B. 3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. | Look for and express regularity in repeated reasoning. |
| Day 24 |  |  |  |

Summer Scholars and Common Core Math Standards
Rising 2nd Grade

| Day | Lesson | Primary Mathematics Standards | Standards for Mathematical Practice |
| :---: | :---: | :---: | :---: |
| Day 1 | Lesson 1 | 1.OS.A. 1 (addition) 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 forthe unknown number to represent the problem e problem | Construct viable arguments and critique the reasoning of others. |
| Day 2 |  |  |  |
| Day 3 | Lesson 2 | 1.OA.D. 8 (addition) Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8+?=11,5=-3,6+6=\hat{\rho}$. | Use appropriate tools strategically. |
| Day 4 |  |  |  |
| Day 5 | Lesson 3 | 1.Os.A.1 (subtraction) 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 <br>  | Reason abstractly and quantitatively. |
| Day 6 |  |  |  |
| Day 7 | Lesson 4 |  | Reason abstractly and quantitatively. |
| Day 8 |  |  |  |
| Day 9 | Lesson 5 | 1.NBT.B.2.b The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones <br> 1.NBT.B.2.cThe 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) | Construct viable arguments and critique the reasoning of others. |
| Day 10 |  |  |  |
| Day 11 | Lesson 6 | 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 >, =, and <. | Look for and express regularity in repeated reasoning. |
| Day 12 |  |  |  |
| Day 13 | Lesson 7 | 1.NBT.C4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning and sometimes it is necessary to compose a ten. | Construct viable arguments and critique the reasoning of others. |
| Day 14 |  |  |  |
| Day 15 | Lesson 8 | 1.NBT.C4 Add within 100 , including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10 , using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoningused. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. | Use appropriate tools strategically. |
| Day 16 |  |  |  |
| Day 17 | Lesson 9 |  place value, properties of operations, andlor the relationship between addition andsubtraction; ;elate the strategy to a witten mettod and explain the reasoning used. | Use appropriate tools strategically. |
| Day 18 |  |  |  |
| Day 19 | Lesson 10 |  | Look for and express regularity in repeated reasoning. |
| Day 20 |  |  |  |
| Day 21 | Lesson 11 | 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. | Use appropriate tools strategically. |
| Day 22 |  |  |  |
| Day 23 | Lesson 12 | 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 theseexamples that decomposing into more equal shares creates smaller shares. | Look for and make use of structure. |
| Day 24 |  |  |  |

Summer Scholars and Common Core Math Standards
Rising 3rd Grade

| Day | Lesson | Primary Mathematics Standards | Standards for Mathematical Practice |
| :---: | :---: | :---: | :---: |
| Day 1 | Lesson 1 | 2.NBT.A.1.a 100 can be thought of as a bundle of ten tens - called a "hundred." <br> 2.NBT.A.1.b The numbers $100,200,300,400,500,600,700,800,900$ refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). | Reason abstractly and quantitatively. |
| Day 2 |  |  |  |
| Day 3 | Lesson 2 | 2.NBT.A. 3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. | Construct viable arguments and critique the reasoning of others. |
| Day 4 |  |  |  |
| Day 5 | Lesson 3 | 2.NBT.A. 4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. <br> 2.NBT.A. 3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. | Look for and make use of structure. |
| Day 6 |  |  |  |
| Day 7 | Lesson 4 | 2.NBT.B. 5 (addition) Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. | Reason abstractly and quantitatively. |
| Day 8 |  |  |  |
| Day 9 | Lesson 5 | 2.NBT.B. 5 (subtraction) Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. | Reason abstractly and quantitatively. |
| Day 10 |  |  |  |
| Day 11 | Lesson 6 | 2.NBT.B. 7 (addition)Add and subtract within 1000, using concrete models or drawings and strategies base on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. <br> 2.NBT.B. 9 Explain why addition and subtraction strategies work, using place value and the properties of operations. | Use appropriate tools strategically. |
| Day 12 |  |  |  |
| Day 13 | Lesson 7 | 2.NBT.B. 7 (subtraction)Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one ad or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. <br> 2.NBT.B. 9 Explain why addition and subtraction strategies work, using place value and the properties of operations. | Use appropriate tools strategically. |
| Day 14 |  |  |  |
| Day 15 | Lesson 8 | 2.OA.A. 1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. | Reason abstractly and quantitatively. |
| Day 16 |  |  |  |
| Day 17 | Lesson 9 | 2.OA.A. 1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. | Look for and make use of structure. |
| Day 18 |  |  |  |
| Day 19 | Lesson 10 | 2.MD.A. 1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. <br> 2.MD.A. 2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. | Construct viable arguments and critique the reasoning of others. |
| Day 20 |  |  |  |
| Day 21 | Lesson 11 | 2.MD.C. 7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. | Model with Mathematics. |
| Day 22 |  |  |  |
| Day 23 | Lesson 12 | 2.G.A. 1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. 5 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. | Reason abstractly and quantitatively. |
| Day 24 |  |  |  |

Summer Scholars and Common Core Math Standards Rising 4th Grade


Summer Scholars and Common Core Math Standards Rising 5th Grade

| Day | Lesson | Primary Mathematics Standards | Standards for Mathematical Practice |
| :---: | :---: | :---: | :---: |
| Day 1 | Lesson 1 | 4.OA.A. 2 (multiply)Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. | Reason abstractly and quantitatively. |
| Day 2 |  |  |  |
| Day 3 | Lesson 2 | 4.OA.A. 2 (divide) Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. | Use appropriate tools strategically. |
| Day 4 |  |  |  |
| Day 5 | Lesson 3 | 4.0A.B. 4 Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range $1-100$ is a multiple of a given one-digit number. Determine whether a given wholenumber in the range $1-100$ is prime or composite. い | Look for and make use of structure. |
| Day 6 |  |  |  |
| Day 7 | Lesson 4 | 4.NBT.A.3 Use place value understanding to round muti-digit whole numbers to any place. | Construct viable arguments and critique the reasoning of others. |
| Day 8 |  |  |  |
| Day 9 | Lesson 5 | 4.NBT.B. 5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangula a arrays, and/or area models. | Use appropriate tools strategically. |
| Day 10 |  |  |  |
| Day 11 | Lesson 6 | 4.NBT.B. 5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | Construct viable arguments and critique the reasoning of others. |
| Day 12 |  |  |  |
| Day 13 | Lesson 7 | 4.NBT.B. 6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multipicaction and division. Illustrate and explain the calculation byusing equations, rectangular arrays, and/or area models. . | Look for and express regularity in repeated reasoning. |
| Day 14 |  |  |  |
| Day 15 | Lesson 8 |  | Use appropriate tools strategically. |
| Day 16 |  |  |  |
| Day 17 | Lesson 9 |  | Look for and express regularity in repeated reasoning. |
| Day 18 |  |  |  |
| Day 19 | Lesson 10 | 4.NF.B.3.a Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. | Look for and express regularity inrepeated reasoning. |
| Day 20 |  |  |  |
| Day 21 | Lesson 11 | 4.MD.A. 3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor. | Reason abstractly and quantitatively. |
| Day 22 |  |  |  |
| Day 23 | Lesson 12 |  | Construct viable arguments and critique the reasoning of others. |
| Day 24 |  |  |  |

Summer Scholars and Common Core Math Standards Rising 6th Grade

| Day | Lesson | Primary Mathematics Standards | Standards for Mathematical Practice |
| :---: | :---: | :---: | :---: |
| Day 1 | Lesson 1 | 5.OA.A. 1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. | Use appropriate tools strategically. |
| Day 2 |  |  |  |
| Day 3 | Lesson 2 | 5.OA.A. 2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by $2^{\prime \prime}$ as $2 \times(8+7)$. Recognize that $3 \times(18932+921)$ is three times as large as $18932+921$, without having to calculate the indicated sum or product. | Look for and express regularity in repeated reasoning. |
| Day 4 |  |  |  |
| Day 5 | Lesson 3 | 5.NBT.A.3.b Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. | Construct viable arguments and critique the reasoning of others. |
| Day 6 |  |  |  |
| Day 7 | Lesson 4 | 5.NBT.B. 7 (add/subtract) Add, subtract, multiply, and divide decimals to hundredths, 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. | Reason abstractly and quantitatively. |
| Day 8 |  |  |  |
| Day 9 | Lesson 5 | 5.NBT.B. 7 (multipy) Add, subtract, multiply, and divide decimals to hundredths, 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. | Reason abstractly and quantitatively. |
| Day 10 |  |  |  |
| Day 11 | Lesson 6 | 5.NBT.B. 7 (divide) Add, subtract, multiply, and divide decimals to hundredths, 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. | Look for and express regularity in repeated reasoning. |
| Day 12 |  |  |  |
| Day 13 | Lesson 7 | 5.NF.A. 1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $2 / 3+5 / 4=8 / 12+15 / 12=$ 23/12. (In general, $a / b+c / d=(a d+b c) / b d$. | Use appropriate tools strategically. |
| Day 14 |  |  |  |
| Day 15 | Lesson 8 | 5.NF.B.4.a Interpret the product (a/b) $\times \mathrm{q}$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(2 / 3) \times 4=8 / 3$, and create a story context for this equation. Do the same with $(2 / 3) \times(4 / 5)=8 / 15$. ( $\ln$ general, $(\mathrm{a} / \mathrm{b}) \times(\mathrm{c} / \mathrm{d})=$ ac/bd.) <br> 5.NF.B.7.b Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div(1 / 5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div(1 / 5)=20$ because $20 \times(1 / 5)=4$. | Look for and make use of structure. |
| Day 16 |  |  |  |
| Day 17 | Lesson 9 | 5.NF.B.7.b Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div(1 / 5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div(1 / 5)=20$ because $20 \times(1 / 5)=4$. | Reason abstractly and quantitatively. |
| Day 18 |  |  |  |
| Day 19 | Lesson 10 | 5.NF.B.7.a Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $(1 / 3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1 / 3) \div 4=1 / 12$ because $(1 / 12) \times 4=1 / 3$. | Use appropriate tools strategically. |
| Day 20 |  |  |  |
| Day 21 | Lesson 11 | 5.MD.C.5.a Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold wholenumber products as volumes, e.g., to represent the associative property of multipication. <br> 5.MD.C. 4 Measure volumes by counting unit cubes, using cubic cm , cubic in, cubic ft , and improvised units. | Look for and express regularity in repeated reasoning. |
| Day 22 |  |  |  |
| Day 23 | Lesson 12 | 5.G.A. 1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x -axis and x -coordinate, y -axis and y -coordinate). | Reason abstractly and quantitatively. |
| Day 24 |  |  |  |

