**Math Curriculum: Grade 1**

**Instructional Focus:** developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; developing understanding

of whole number relationships and place value, including grouping in tens and ones, developing understanding of linear measurement and measuring

lengths; reasoning about attributes of, and composing and decomposing, geometric shapes

**Grade Overview:**

● Operations and Algebraic Thinking: represent and solve problems involving addition and subtraction, understand and apply properties of

operations and the relationship between addition and subtraction

● Number and Operations in Base Ten: extend the counting sequence, understand place value, use place value understanding and properties of

operations to add and subtract

● Measurement and Data: measure lengths, tell and write time, represent and interpret data

● Geometry: reason with shapes and their attributes

**Overarching Mathematical Practices Learning Targets:**

● I can understand a problem, find a way to solve it, and work until the answer makes sense.

● I can think about and explain the operations needed to solve a problem.

● I can explain my work and agree or disagree with others.

● I can use numbers to solve real-life problems and can make connections to my life.

● I can choose the correct tools to help me solve a problem.

● I can clearly tell others how I got an answer and why.

● I can find and use patterns and relationships to solve problems.

● I can use what I already know to learn new skills.

**Learning Targets**

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| **Operations and Algebraic**  **Thinking** | **Number and Operations in Base**  **Ten** | **Measurement and Data** | **Geometry** |
| ● I can model and solve addition and  subtraction word problems using objects,  drawings, and equations with unknown  numbers in different positions within 20  (e.g. 6+\_=8).  ● I can add three whole numbers whose  sum is less than or equal to 20.  ● I can solve word problems with three  whole numbers using objects, drawings,  and equations.  ● I can show that adding or subtracting  zero to any number does not change the  answer.  ● I can show adding up to three numbers in  any order does not change the sum.  ● I can give an example and explain how a  subtraction equation can be rewritten as  an addition equation within 20.  ● I can rewrite a subtraction equation  as an addition equation with a missing  addend.  ● I can add with strategies (by counting  all, counting on, one more and two  more, doubles and doubles plus one).  ● I can subtract with strategies (by  counting back, counting up from, one  less and two less, doubles minus one).  ● I can add and subtract within 10 with  automaticity.  ● I can add and subtract within 20 by  counting on and making ten.  ● I can explain that the equals sign  means “same as”.  ● I can compare the value of both sides of  an equation and determine whether the  equation is true or false. | ● I can count, read, and write to 120  starting at 1 or any number.  ● I can label a set of objects up to 120  with the written numeral.  ● I can represent numbers as ones and  tens.  ● I can explain the value of each digit in a  two-digit number (place value).  ● I can determine when and explain why  a two-digit number is greater than,  less than, or equal to another two-digit  number.  ● I can record the comparison using the  symbols >, <, and =.  ● I can use concrete models or drawings to show and explain a strategy based on  place value to add the following: a two  digit number and a one digit number, a  two digit number and a multiple of ten,  and a two digit number and a two digit  number.  ● I can mentally find ten more or ten less  for any two digit number.  ● I can explain why the tens digit increases  or decreases by one when ten is added  or subtracted.  ● I can subtract a multiple of 10 from a  multiple of 10 and explain the strategy  (90-40=50). | ● I can compare and order three objects  by length from shortest to longest.  ● I can explain why it is important to avoid gaps and overlaps when measuring.  ● I can report the length of an object as  the total number of shorter objects it  takes to span the longer object.  ● I can identify a digital and an analog  clock.  ● I can identify the hours and minutes on a digital and an analog clock.  ● I can tell how many minutes are in an  hour.  ● I can explain why 30 minutes is a half  hour.  ● I can identify, write and draw the hands  for time to the hour and half hour on  a digital and analog clock using the  terms “\_o’clock,” “\_thirty”, and “half  past \_.”  ● I can organize and represent data in up  to 3 categories (groups).  ● I can answer questions about the total  number of data points and how many  data points are in each category.  ● I can determine when a category has  more or less than another category. | ● I can explain the difference between  defining attributes (sides, angles, faces)  and non-defining attributes  (color, orientations, overall size).  ● I can construct and draw a shape when  given defining attributes. I can identify 2  dimensional shapes (rectangles, squares,  triangles, trapezoids, circles, half and  quarter circles) and 3 dimensional  shapes (cubes, rectangular prisms, cones, cylinder).  ● I can create new shapes using 2  dimensional and/or 3 dimensional shapes.  ● I can divide a circle and rectangle into two and four equal parts.  ● I can describe the equal parts of a  circle and rectangle with words (halves,  fourths, and quarters).  ● I can describe the whole by the number  of equal parts (2 halves make a whole).  ● I can explain the more equal parts in a  given shape, the smaller the parts. |