URBANDALE
COMMUNITY SCHOOL DISTRICT

<u>Course Title:</u>	**Second Grade Math**

<u>Description:</u>   In second grade, content focuses on procedures, concepts, and applications in four critical areas:
- Understanding of base ten notation (place value)
- Building fluency with addition and subtraction
- Using standard units of measure
- Describing and analyzing shapes

Number and Quantity

Reporting Topic	**Grade Level Standards**	**Competency Statement**
Place Value	Understand place value • Understand that the three digits of a three digit number represent amounts of hundreds, tens, and ones; e.g. 706 equals 7 hundreds, 0 tens, and 6 ones. (2.NBT.A.1) • Count within 1000; skip count by 5s, 10s, and 100s (2.NBT.A.2) • Read and write numbers to 1000 using base ten numerals, number names, and expanded form (2.NBT.A.3) • Compare two three digit numbers based on meanings of the hundreds, tens, and ones digits using <, >, and = symbols to record the results of comparisons (2.NBT.A.4)	Students will: • Read and Write numbers to 1000 and compare two 3-digit numbers.

Operations and Algebra

Reporting Topic	**Grade Level Standards**	**Competency Statement**
	Use place value understanding and properties of operations to add and subtract • Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction (2.NBT.B.5) • Add up to four two digit numbers using strategies based on place	Students will: • Add and Subtract numbers within 1000 and explain why addition and subtraction

Reporting Topic	Grade Level Standards	Competency Statement
Addition and Subtraction	value and properties of operations (2.NBT.B.6) ● 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 adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds (2.NBT.B.7) ● Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. (2.NBT.B.8) ● Explain why addition and subtraction strategies work, using place value and the properties of operations. (2.NBT.B.9) Fluently add and subtract within 20 ● Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one–digit numbers. (2.OA.B.2)	strategies work.
Multiplication and Division	Work with equal groups of objects to gain foundations for multiplication. ● Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. (2.OA.C.3) ● Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. (2.OA.C.4)	Students will: ● Use addition to find objects arranged in rectangular arrays and write an equation to express the total.

Geometry

Reporting Topic	**Grade Level Standards**	**Competency Statement**
Shapes	Reason with shapes and their attributes ● Recognize and draw shapes having specified attributes, such as	Students will: ● Recognize and draw

	a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. (2.G.A.1)	shapes with specific attributes.
Compose and Decompose Shapes	Reason with shapes and their attributes ● Partition a rectangle into rows and columns of same–size squares and count to find the total number of them. (2.G.A.2) ● Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves, thirds, half of, a third of, etc.*, and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. (2.G.A.3)	Students will: ● Divide circles and rectangles into two, three, and four equal shares, describing the shares.

Measurement, Data, Statistics, and Probability

Reporting Topics	Grade Level Standards	Competency Statement
Measurement	Measure and estimate length in standard units ● Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. (2.MD.A.1) ● 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. (2.MD.A.2) ● Estimate lengths using units of inches, feet, centimeters, and meters. (2.MD.A.3) ● Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. (2.MD.A.4)	Students will: ● Measure length of objects of different lengths using different tools.
	Represent and Interpret Data ● Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by	Students will: ● Draw a picture graph or bar graph to represent a

Represent and Interpret Data	making a line plot, where the horizontal scale is marked off in whole–number units. (2.MD.D.9) ● Draw a picture graph and a bar graph (with single–unit scale) to represent a data set with up to four categories. Solve simple put–together, take–apart, and compare problems using information presented in a bar graph. (2.MD.D.10)	data set
Time	Work with time and money ● Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. (2.MD.C.7)	Students will: ● Tell and write time to the nearest five minutes on analog and digital clocks
Money	Work with time and money ● Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? (2.MD.C.8)	Students will: ● Solve word problems involving money appropriately