Grade: 1 Unit: 7	Measurement and Data- How Many? How Much? How Long?	4 Weeks

Progression	
K	Students learned to describe measurable attributes of an object, directly compare two objects and classify objects into categories.
1st Grade	**Students will learn to order three objects and compare two objects using a third object and express the length of an object using non-standard units. Students will learn to tell time to the hour and half hour. They will also organize, represent and interpret data.**
2nd Grade	Students will extend their knowledge in measurement by estimating and using standard units to measure. They will relate addition and subtraction to measurement. They will tell time to the nearest five minutes and solve problems using money. Students will also create picture and data graphs.

STUDENT LEARNING GOALS

Mathematics Standards *(Appendices A & B)*

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.

1.MD.A.1: Order three objects by length; compare the lengths of two objects indirectly by using a third object.

1.MD.A.2: 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; 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*.

1.MD.B.3: Tell and write time in hours and half-hours using analog and digital clocks.

(Include MP1 and MP6 for all units for 2014-2015)
MP1: Make sense of problems and persevere in solving them.

MP6: Attend to Precision

Interdisciplinary Standards	
Technology Integration *(Appendix C)*	**21st Century Skills** *(Appendix D)*
IS1. Information Strategies IS2. Information Use	TCS1. Use of Information TCS5. Problem Solving

Key Vocabulary	
Analog clock	**Measure**
Compare	**Minute**
Data	**Minute hand**
Digital clock	**O'clock**
Half-hour	**Picture graph**
Half past	**Shorter**
Hour	**shortest**
Hour hand	**Sort**
Length	**Taller**
Longer	**tallest**
Longest	**Tally chart**
	Tally marks
	Unit

Enduring Understandings (MI p.97)	**Essential Questions**
• I can sort and count objects. • I can compare data. • I can order objects by length. • I can compare lengths of objects. • I can measure lengths of objects. • I can tell time to the hour and half-hour.	• How can we sort and count objects to compare data? • How can we order objects by length and compare them? • How can we measure using non-standard units? • How can we tell time to the hour and half-hour?

Assessment Plan	
Summative Assessment(s)/Performance Based Assessments including 21st Century Learning	**Formative and Diagnostic Assessment(s)**
RCC Unit 7 Review, MI p.162-164 RCC Unit 7 Practice, PPS p.87-90	STAR Math Assessment (Spring) RCC Embedded Tasks and Assessments

Learning Plan Components	
Text	**Ready Common Core Mathematics Instruction 1**, 2014, Curriculum Associates, ISBN: 978-0-7609-8861-9
Print	**Ready Common Core Mathematics Teacher Resource Book 1**, 2014, Curriculum Associates, ISBN: 978-0-7609-8857-2
Electronic	www.teacher-toolbox.com www.stratfordmath.wikispaces.com www.xtramath.org

Week 1	Students will: • Define meaningful categories for a given set of objects and sort the objects according to the categories. • Count to find the number of objects in each category. • Represent categorical data using tall charts, charts with numbers, and picture graphs. • Answer questions about data in charts and graphs. • Compare quantities represented in charts and graphs.

Lessons	**Tasks / Activities**	**Worksheets**	**Technology**
<u>RCC Lesson 29 & 30:</u> Sort and Count Compare Data (TRB p.226-239) *Engage NY Lessons	*Bar Graph Template *Make Your Own Bar Graph	MI p.138-145 PPS p.80 & 81 *SF R, P, E & PS 8-11 *SF R, P, E & PS 8-12 *SF R, P, E & PS 8-14 *Favorite Fruit *Students who Play Piano or Violin *Trudy Turnips Garden *Focus on the Question Pictograph *Focus on the Question Graph *Turn Pictures into Answers *Make a Graph *A Splash of Color *Cool Kites *Engage NY 1-4	*RCC Interactive Lesson: Picture Graphs *RCC Interactive Lesson: Subtraction Concepts: Comparison *Online Video: Tally Charts and Bar Graphs *Online Practice: Jelly Bean Tree *Online Practice: Tally Marks *Online Game: What's Your Favorite? *Online Game: Pictograph Game *Online Pictograph Creator

Week 2	Students will: • Order three objects by length. • Recognize that sometimes it is not possible to compare length directly. • Compare two objects by comparing there lengths to a third, reference, object. • Use logical reasoning to indirectly compare the length of objects.

Lessons	**Tasks / Activities**	**Worksheets**	**Technology**
<u>RCC Lesson 31 & 32:</u> Order Objects by Length Compare Lengths (TRB p.240--253) *Engage Lessons	*Scoop and Order & Recording Sheet *My Ribbon & Recording Sheet *Ordering Cuisenaire Rods	MI p.146-153 PPS p.82 & 83 *Comparing Object Lengths *Compare and Order Length *Compare and Order Length A *Indirect Length Word Problems *Indirect Length Word Problems A (Enrichment) *Order by Length *Engage Lessons 1-3	*Online Game: Which is the Longest?

Week 3	Students will: • Measure a length using non-standard units of measure. • Understand that the number of iterated units from end to end is a measure. • Iterate units with no gaps or overlaps. • Understand that "unit" implies uniformity in length.		
Lessons	**Tasks / Activities**	**Worksheets**	**Technology**
<u>RCC Lesson 33:</u> Understand Length Measurement (TRB p.254-260) * Engage NY Lessons	*Measure a Friend *Measure It *Measure It with Cubes	MI p.154-157 PPS p.84 *SF R, P, E & PS 10-1 *Measure and Color *Measure and Color A *Measure the Buildings *Measure the Crayons *Measure Height *Measuring with Paper Clips *Using Units to Measure *A Clean Kitchen *Colorful Eggs *A Busy Builder *How Does Your Garden Grow *Butterfly *Engage NY 1-3	*Online Game: Curious George How Tall? *Online Game: Measurements by Units *Online Game: Paper Clips
Week 4	Students will: • Tell time to the hour and half hour, using analog and digital clocks. • Write the time to the hour and half hour. • Understand that 30 minutes is the same as a half-hour.		
Lessons	**Tasks / Activities**	**Worksheets**	**Technology**
<u>RCC Lesson 34:</u> Tell Time (TRB p.261-267) *Engage NY Lessons	*What's the Hour?-Make a Clock *What's the Minute?-Make a Clock *My Favorite Time of Day *Time Barrier Game *Pick a Clock Center	MI p.158-161 PPS p.85 *SF R, P, E & PS 6-2 *SF R, P, E & PS 6-3 *SF R, P, E & PS 6-4 *A Busy Day *Almost Done *Game Time *Time to Eat *Write Time *Starry Night *Half Past the Hour *Calling All Cows *Parade Time *Engage NY 1-4	

Summative Assessment	Performance Task
RCC Unit 7 Review -MI p. 162-164 -Scoring Guide (TRB p. 268-269)	RCC Unit 7 Practice -PPS p.87-90 -Rubric (Teacher-Toolbox)