Understanding by Design: Mountain Home School District 193

Designer Name: 1st Grade Teachers edited by Kaye G. and Lisa R.   **Date:** April 25, 2014

Subject Area: Math   **Grade Level(s): 1**

Unit Title/Focus: 131-135; A-D

Estimated Amount of Instructional Time: ~**12**

Stage 1 – (Desired Results)

State Content and Skill Standards:
Domain: Operations and Algebraic Thinking CC.1.OA
Domain: Number and Operations in Base Ten CC.1.NBT

Enduring Understandings: (what are the big ideas, what are the specific understandings desired)	*Essential Questions: (what questions will foster inquiry, understanding, and transfer of learning)*
Understand and apply properties of operations and the relationship between addition and subtraction CC.1.OA.3, CC.1.OA.4 Add and subtract within 20 CC.1.OA.6 Extend the counting sequence CC.1.NBT.1 Understand place value CC.1.NBT.2a Students will understand that… - When weighing small objects we use ounces or grams - There are different ways to solve problems - Temperature is measured using a thermometer - Objects can be moved in different ways	- How do I know that I weigh more than one pound? - What are some items I could weigh using grams? - How can I determine the best way to solve a problem? - How do I measure temperature? - What are the different ways I can move an object? - Which base ten blocks would you use to show the number (271)? - What is a number you can make using four base ten blocks?

Big Idea(s)
Place Value to 100, Fact Families, Numbers to 500, Weighing with Ounces & Grams, Transformations

What Students will know: (what knowledge will they acquire)	*What Students will be able to do: (what will they eventually be able to do as a result of their skills learned/knowledge)*
Math vocabulary: calculator, coldest, fact family, flip, gram, hottest,, pound, slide, turn - Addition and Subtraction - Counting - Estimating and weighing - Measuring and ordering temperature - Exploring transformations - Exploring the use of a calculator	- Counting hundreds, tens, and ones - Writing a some, some went away story problem - Using the inverse operation to solve a problem - Ordering 2 and 3 digit numbers - Measuring mass using nonstandard units - Ordering objects from lightest to heaviest - Exploring transformations: flip, slide, and turns - Show that there are 2 addition and 2 subtraction problems to a fact family

Stage 2 - Assessment Evidence (acceptable assessment evidence that students understand)

Performance Tasks: (what authentic performance task (s) will students demonstrate understanding; by what criteria will it be judged?)	*Other Evidence: (quizzes, tasks, academic prompts, homework, observations)*

- Write a story for a number sentence - Write date - Read a thermometer and write the temperature - Count quarters - Count by 2s forward	Cumulative Written Assessments 26
	    Oral Assessment 14
	    Teacher Observations
	    Homework
	    Guided Practice

• Count by 10s backward • Draw a line segment to a given length using centimeters • Add and subtract 2-digit numbers without regrouping	

Stage 3 - Learning Plan (sequence of teaching and learning activities that will produce desired understandings, engagement and development) Use WHERETO elements to help you:

Learning Activities:
Lesson 131 Identifying and counting hundreds, tens, and ones
Lesson 132 writing addition and subtraction fact families, 9-4, 9-5, 9-3, 9-6, lesson extension: identifying the unknown number in a subtraction equation
Lesson 133 representing numbers to 500 using pictures
Lesson 134 writing addition and subtraction fact families 7-3, 7-4, 8-3, 8-5
Lesson 135 estimating and weighing objects using nonstandard units, exploring standard units of mass
Lesson A subtraction facts: minuends greater than 10
Lesson B using a calculator to explore addition, subtraction, and skip counting
Lesson C ordering two or more objects by temperature, measuring temperature using a thermometer
Lesson D exploring transformations: Slides (translations), turns (rotations), and flips (reflections)

W=help the students know WHERE the unit is going and WHAT is expected/Help teacher to know where the students are coming from (prior knowledge, interests)
H=HOOK all students and hold their interest
E=EQUIP students, help them EXPERIENCE the key ideas and EXPLORE the issue
R=Provide opportunities to RETHINK and REVISE their understanding/work
E (2)=Allow students to EVALUATE their work
T=Be TAILORED (personalized) to different needs, interests, and abilities of learners
O=Be ORGANIZED to maximize initial and sustained engagement as well as effective learning

Assessment Tasks that Provide Evidence for Claims including DOK	☐ **Claim #1/DOK 1, 2, 3, 4 (circle one):** ☐ **Claim #2/DOK 1, 2, 3, 4 (circle one):** ☐ **Claim #3/DOK 1, 2, 3, 4 (circle one):** ☐ **Claim #4/DOK 1, 2, 3, 4 (circle one):**
Achievement Level Descriptors	**ALD #1: ALD #2: ALD #3: ALD #4: (circle one):**
Materials/Resources	**Pennies, bathroom scale, 1 pound object such as a box of sugar, objects to weigh, small paper clips, quarters, calculators, big sheets, and fact cards**