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: 121-130
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)
Understand and apply properties of operations and the relationship between addition and subtraction CC.1.OA.4
Add and subtract within 20 CC.1.OA.5, CC.1.OA.6
Use place value understanding and properties of operations to add and subtract CC.1.NBT.5, CC.1.NBT.6
Reason with shapes and their attributes CC.1.G.1, CC.1.G.2

Students will understand that…
- A quarter is a coin that is worth 25 cents
- A sorting rule is used to find a fractional part of a set
- Experiments can be used to test events to see if they are certain, likely, or impossible
- There are words that we use when we talk about temperature

Essential Questions: (what questions will foster inquiry, understanding, and transfer of learning)
- A quarter can be traded for how many pennies? Nickels?
- How can I find the fractional part of a set of marbles that are white?
- What is an event that is certain to happen? Likely? Impossible?
- How is cool different from cold?

Big Idea(s)

Difference of 1 & 2, Fractions of a Set, Subtracting 10, identifying Polygons, Solids, Quarters, Subtract 2-digit Numbers, Temperature, Subtract half of a Double, Probability Experiment

What Students will know: (what knowledge will they acquire)
Math vocabulary: certain, degree, difference, edge, Fahrenheit, impossible, less than, likely, polygon, quarter, rectangular, prism, temperature, thermometer, side

- Subtraction
- Fractions and fractional parts
- Polygons
- geometric solids
- 2 dimensional shapes
- Money
- Temperature
- probability
- Problem solving

What Students will be able to do: (what will they eventually be able to do as a result of their skills learned/knowledge)
- Write a some, some went away story
- Identify a fractional part of a set
- Showing money amounts using coins
- Counting quarters, dimes, nickels, and pennies
- subtracting 1 & 2-digit numbers without regrouping
- reading a thermometer to the nearest 10 degrees
- finding the missing number in a doubles fact family
- describing the likelihood of an event
- subtracting 10 from a number
- identifying polygons and non polygons: making pentagons and hexagons, composing other 2 dimensional shapes

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

Other Evidence: (quizzes, tasks, academic prompts, homework, observations)

judged?) • Draw a picture to solve addition problems • Write a story for a number sentence • Write date • Counting a mixed group of dimes, nickels, and pennies • Draw a 3 sided polygon • Identify spheres, cubes, cones, and cylinders • Add and subtract 10 • Add 3 single digit numbers • Count by tens from a single digit number • Measure with centimeters • Compare numbers using correct comparison symbol >, <, = • Read a graph and write an observation about the graph	Cumulative Written Assessments 24 & 25 Oral Assessment 13 Teacher Observations Homework Guided Practice

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 121 Subtraction Facts: Differences of 1, Lesson Extension Activity: Solving word problems with unknowns
Lesson 122 Identifying a fractional part of a set
Lesson 123 Subtracting 10 from a number
Lesson 124 Identifying a drawing polygons, Lesson Extension Activity: identifying halves and fourths of a circle, composing two-dimensional shapes (circles)
Lesson 125-1 Subtraction Facts: differences of 2
Lesson 125-2 Identifying geometric solids (rectangular prisms)
Lesson 126 Identifying and counting quarters
Lesson 127 subtracting 2-digit numbers without regrouping, Lesson Extension: subtracting a multiple of 10 from a multiple of 10
Lesson 128 identifying cold, cool, warm, and hot temperatures, reading a thermometer to the nearest 10 degrees
Lesson 129 Subtraction facts: subtracting half of a double
Lesson 130-1 Identifying events as certain, likely, or impossible
Lesson 130-2 drawing a picture to solve a problem, using a table to solve a problem

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	**Zip lock bags, 2 empty cereal boxes, 3 building blocks, 2 rectangular prisms, 1 triangular prism, quarters, dimes, nickels, pennies, price tags, construction paper, small brown paper bag, big sheets, and fact cards**

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